



BOROUGH OF ASHTON-UNDER-LYNE.

ANNUAL REPORT

— OF THE —

MEDICAL OFFICER OF HEALTH

FOR THE YEAR

1910.



ASHTON-UNDER-LYNE
—CORPORATION—

HEALTH COMMITTEE.

Chairman :
ALDERMAN ALLEN SHAW.

Deputy Chairman :
COUNCILLOR BOWMAN.

HIS WORSHIP THE MAYOR (ALDERMAN WATERHOUSE).

ALDERMAN NEWTON.

COUNCILLOR ANDREW.

„ BRADLEY.

„ R. HAMER.

„ T. KELSALL.

„ SPENCER.

„ WOOD.

HEALTH DEPARTMENT.

Medical Officer of Health :
J. W. TALENT, M.D., M.R.C.S., D.P.H.

Chief Sanitary Inspector :
W. C. MORRIS, M.I.H.

Assistant Sanitary Inspector :
J. DAVIES.

Disinfecto r :
T. LEES.

Health Visitor :
MRS. ELLIOTT.

Manageress of Sterilized Milk Department :
MISS WINDER.

REPORT OF THE MEDICAL OFFICER
OF HEALTH.

THE PUBLIC HEALTH OFFICES,
TOWN HALL, CHAMBERS,
ASHTON-UNDER-LYNE,

March, 1911.

TO THE CHAIRMAN AND MEMBERS
OF THE HEALTH COMMITTEE.

GENTLEMEN,—

I have the honour to present my Fifth Annual Report on the Health of the Borough and its sanitary conditions, and on the work of the Health Department, during the year 1910. It is satisfactory to be able to announce that the general Death Rate is the lowest ever recorded, being 15·8 per 1,000.

The Infantile Mortality, 148·2 per 1,000 births, is 19·1 lower than the average for the preceding five years.

Deaths from Infectious Diseases are also much fewer in number.

On the other hand, the Birth Rate of 23·4 per 1,000 is the lowest recorded, with the exception of last year, when it was 23·1.

There has been a high death rate from Whooping Cough and Typhoid Fever.

Phthisis has given an increased number of death as compared with the average for the past ten years.

Some provision is very desirable for the Sanatorium treatment of Phthisis, there being at the present time none at all.

My most cordial thanks are due the Chairman and Members of the Health Committee for their support, and to the Chief Sanitary Inspector and the other Members of my Staff for their admirable work during the year.

I am, Gentlemen,

Yours obediently,

JOHN WILLIAM TALENT.

ANNUAL REPORT, 1910.

(a).—An account of any influences threatening the health of the district, the prevalence of infectious or epidemic diseases therein, and the measures taken for their prevention.

EMPLOYMENT OF CHILDREN AS HALF-TIMERS.

During the latter part of the year 1909 I made enquiry into the conditions under which children work in the mill as half-timers. The following are the conclusions presented :—

The total number of Half-Time Exemption Certificates granted during the year has been, Boys, 152, Girls, 185. Of these, I examined between the months of May and December, 226 (boys 100, girls 126). The occupation of the boys might be put into two general classes as follows:—(1), working in the mill, 67; (2) working as errand boys, 33. Of the girls, 70 working in the mill, 56 as domestic half-timers, which means staying at home to help in the house-work. Those who work in the mill receive no wages for the few weeks or months whilst they are learning, except 3d. or 6d. a week for pocket money. When the wage commences, it varies roughly from 2/6 to 4/- a week. In 50 cases the mother went out to work. In every case I enquired into the occupation of each member of the family. This gave me, I consider, a fair means of estimating where poverty made it necessary for a child to commence working at the earliest possible moment, even although I did not ascertain the actual total weekly income of the family. I estimated by this means that only 23 were so poor as to require the sum of 2/6 or 4/- earned by the child as a half-timer.

Other facts ascertained from each half-timer were the time of going to bed at night and the time of rising in the morning. By this means the amount of sleep obtained was found to be, as follows:—

HOURS OF SLEEP OBTAINED.

7 hrs.	$7\frac{1}{2}$ hrs.	8 hrs.	$8\frac{1}{2}$ hrs.	9 hrs.	$9\frac{1}{2}$ hrs.	10 hrs.	$10\frac{1}{2}$ hrs.
13	20	53	54	16	21	19	30

These children work at the mill in the mornings of one week, and in the afternoons of the next week in a constant alternation. During the week when they are at work in the mornings they rise from 5 to 5-30 a.m., begin work in the mill at 6 a.m., and work, with half an hour's interval for breakfast, to 12-30 p.m. In the afternoons they attend school. During the week when they are at school in the morning, they do not rise until 7-0 to 8-0 a.m. They are at school from 9 to 12, and work in the mill from 1-30 to 5-30 continuously. But they go to bed about the same time every night. It follows, therefore, that they have two to three hours more sleep in one week than in the week following. This in itself must be prejudicial to health in growing children. The amount of sleep shewn in the table above is the minimum obtained when working at the mill in the mornings, and will require, therefore, to have two to three hours added to it in most cases, to obtain the amount for the alternate week, when they are attending school in the morning.

Dr. Dukes gives the following amounts of sleep as required at different ages :—

Between 10 years and 13 years $10\frac{1}{2}$ hours.
 " 13 " 15 " 10 "

It will be seen that of the half-timers 54 obtained $8\frac{1}{2}$ hours sleep, 53 obtained 8 hours sleep, and 13 as little as 7 hours. Those who obtained $10\frac{1}{2}$ hours were mostly girls, who were domestic half-timers.

It appears clear then, that the practice of sending children aged 12 years, to work in the mill as half-timers, results in their obtaining too little sleep, and on that ground alone must be injurious to health.

PREVALENCE OF INFECTIOUS DISEASES.

The total number of cases of Infectious Diseases notified to the Health Department, under the Infectious Diseases Notification Act for the year 1910, was 215. This is 173 less than in the previous year, and also 99 less than the average for the preceding five years. There were 140 cases of scarlet fever, 9 of diphtheria, and 35 of enteric fever. The death rate from the principal epidemic diseases, which include measles, whooping cough, and diarrhoea during the year was 1.7 per 1,000, compared with 1.7 in 1909, 1.7 in 1908, 2.0 in 1907, 1.8 in 1906. The corresponding death rate for the 136 smaller towns was 0.88. Our rate is much in excess of this owing chiefly to the number of deaths from typhoid fever and whooping cough.

ZYMOTIC DEATH RATE IN WARDS.

St. Peter's.	Portland.	Market.	St. Michael's.
1.7	2.7	1.5	1.1

Cases of non-notifiable Infectious Diseases were reported by the Head Teachers of Schools. The details, along with deaths notified, are as follows :—

	Cases Reported.	Deaths.
Measles.....	196	... 12
Whooping Cough	153	... 39
Chicken Pox	72	... 0
Mumps	30	... 0

Under the heading of non-notifiable infectious diseases, also come :—

Diarrhoea.....	17 deaths.
Influenza.....	1 , ,
Phthisis	67 , ,
Other Tubercular Diseases	1 , ,

These figures shew a marked increase in deaths from Whooping Cough, and a less marked increase in deaths from Diarrhoea, when compared with 1909, but a decrease in deaths from Phthisis, Measles and Influenza. The highest number of deaths in any one week was 7, which occurred in the week ending May 1st.

Small Pox.—No cases of Small Pox were notified during the year.

Vaccination.

Year.	Births.	Vaccinations.	Exemptions
1909	1069	343	442
1910	1093	263	564

Scarlet Fever.—There were 140 cases notified, as

against 261 in 1909, 224 in 1908, and 290 in 1907. The attack rate is 3·0 per 1,000, as compared with 5·6 in 1909 and 4·8 in 1908.

Ages.	Cases.	Deaths.	
		Total.	Percentage.
Under 1 year	2	0	0·0
1 to 5 years	35	1	2·8
5,, 15,,	95	0	0·0
15,, 25,,	6	1	15·1
25,, 65,,	2	0	0·0
	—	—	—
Total.....	140	2	1·4

There were two deaths, giving a mortality rate of 1·4 per cent. of the cases, or 0·c4 per 1,000 of the population.

The cases were most numerous in the months of March and April, when there were 21 notifications each, and fewest in September, when there were 3 notifications.

In respect of age, 5·7 per cent. of the cases were over 15 years of age, 67·8 per cent. between 5 and 15, and 26·4 per cent. under 5 years of age.

The mortality was 2·7 per cent. under 5 years of age, and 0·9 per cent. in those over 5 years of age.

Diphtheria.—There were 9 cases of diphtheria notified, compared with 30 in 1909 and 14 in 1908. There were no deaths registered. In 1909 there were 14 deaths, a rate of 46 per cent. of those attacked. The same rate for 1908 was 35·7.

Ages.	Cases.	Deaths.
1 to 5 years.....	4	0
5 „ 15 „	4	0
25 „ 65 „	1	0
	—	—
Total.....	9	0

The attack rate is 0·1 per 1,000 of the population.

During this year Anti-toxin has, for the first time, been supplied free of cost by the Health Committee, to such patients as were unable to pay for the same. Anti-toxin was so supplied for two out of the nine cases. Arrangement has been made with two Chemists, one at either end of the town, to supply the Anti-toxin, free of charge, on the request of a Medical practitioner.

Enteric or Typhoid Fever.—There were 35 cases notified, compared with 54 cases in 1909, 30 cases in 1908, and 17 cases in 1907. This gives an attack rate of 0·7 per 1,000 living. Out of the 35 cases 8 died, a mortality rate of 22·8 per cent. against 12·9 per cent. in 1909. The cases were most numerous in the age period 25 to 65, the number 18 being 51·4 of the total cases.

Ages.	Cases.	Total.	Percentage.	Deaths.
5 to 15 years	8	0	0·0	
15 „ 25 „	9	3	33·3	
25 „ 65 „	18	5	27·7	
Total	35	8	22·8	

Although fewer cases were notified this year, being 35 against 54 in 1909, yet the cases were more fatal, there

being 8 deaths against 7 in 1909. The death rate should not exceed 0·1 of the average general death rate, but in Ashton this rate was 0·17, which is much above the average. The house in each case was visited by the Sanitary Inspector and myself. As to the cause of the cases, the milk supply did not seem to be involved. The milk was obtained from a great many separate sources, and no dealer apparently supplied more than two cases in the year. Many of the patients said they never drank milk at all, except in their tea, and for that they often used Nestle's milk: or occasionally in a milk pudding, when of course it had been cooked.

As to shellfish, three cases had eaten mussels within three weeks of the onset. Two patients had eaten ice cream within three weeks of the onset. The occupation followed was very various. Four were colliers, three carters, three workers in the mill, the others various. In nine cases the houses had more than five inmates. In five there were six inmates, in one eight, and in three were nine. These were all cottage houses. In one of those with nine inmates three cases occurred directly one after another. As to the condition of the premises, in seven cases the waste water closets were in a dirty state, the inside of the pedestal being caked with foeces. The householders were directed to clean these with a mop. Two cases occurred in houses with a town's water closet, twenty-four cases in houses with a tippler closet. In three cases the ash-tubs were overloaded, and had not been emptied for a long time. Another case had rags and bones stored in the backyard. A nuisance of flies was complained of in one house from a manure pit adjoining. Pigeons were

kept in the backyard in another. All these nuisances were promptly abated. One case had apparently contracted the disease at Blackpool whilst there on holiday. The months of greatest prevalence were November and December, when six were notified in each. The sexes affected were male 23, female 12.

It would appear that more care should be taken in the matter of removing refuse and decaying matters of all kinds. Attention is, therefore, being paid especially, just now, to the improvement of manure pits, which are in a neglected condition, and also to the better removal of offal from slaughter-houses. A very large number of the passages running behind cottage houses are unpaved. In these passages collect pools of stagnant water and dirt of various kinds. These places require properly paving and keeping clean. Five of the cases of Typhoid Fever were removed to the Oldham Fever Hospital; the remainder were treated at home. For the better nursing of the latter the Health Committee made a grant of £20 to the District Nursing Association. The Nurses of the Association have been of great help to these cases. Fifteen patients have been attended by them. Each of these cases received on an average 39 visits from the Nurse.

Puerperal Fever.—There was one case only notified. This patient died.

Erysipelas—There were 30 cases notified during the year.

Measles.—There were 12 deaths during the year, giving a death rate of 0·2 per 1,000 living. The rate for 1909 was 0·54, for 1908 was 0·05, and for 1907 was 0·66.

Ages.	Deaths.
Under 1 year	4
Between 1 and 5 years	8

The number of cases reported by School Teachers was 196. An epidemic of Measles commenced to show itself in St. Peter's School, Welbeck Street, during the last week in May, and so affected the attendance of the Infant Department that on May 26th 136 scholars were absent, out of a total of 303 on the register.

This number included both the patients and the contacts. Along with the Measles was much sickness from Whooping Cough. The class rooms of the Department were ventilated as freely as possible and sprayed with disinfectant. The parents were visited and advised by the School Nurse. The disease also attacked the Infant Department in the Parish Central School, but here only 11 cases were reported. In addition to the former precautions, the classes were here taught in the open air, the weather being fine. During September 16 cases were reported from Cockbrook School, and 17 from St. Peter's School, Welbeck Street.

Whooping Cough.—There were 39 deaths, being 23 males and 16 females; 36 were under 5 years of age and 3 between 5 and 15 years. The death rate was thus 0·8 per 1,000 of the population; in 1909 it was 0·1, in 1908 it was 0·4.

It is usual to look upon Measles and Whooping Cough as complaints which are not serious, and therefore to treat them lightly. The following figures show that deaths from

these two diseases during the past ten years were more than four times as numerous as deaths from Scarlet Fever.

Deaths during the past ten years from

Scarlet Fever were	70
Measles were	196
Whooping Cough were.....	139

The Health Visitor regularly points out to Mothers the dangers from these complaints with the means to be taken for avoiding them.

Diarrhoea—There were 17 deaths from Diarrhoea, giving a death rate of 0·2. The deaths in 1909 numbered 10, in 1908 numbered 44, and in 1907 numbered 21.

Phthisis.—There were 67 deaths during the year, being 40 males and 27 females, giving a death rate of 1·4 per 1,000 population.

PHTHISIS DEATH RATE IN WARDS.

	St. Peter's.	Portland	Market.	St. Michael's
Number of Deaths	19	8	18	9
Death Rate	1·2	0·9	1·1	1·3

In the Infirmary died 1 and in the Workhouse 12, belonging to Ashton. There was 1 death from other tubercular disease. The number of deaths occurring between the ages of 15 and 65 was 50, or 74·5 per cent of the total.

Year.	No. of Deaths.	Death Rate per 1000 living	Percentage of Total Number of Deaths from all diseases.
1899	87	...	9·2
1900	69	...	7·6
1901	79	1·8	9·6
1902	69	1·5	8·2
1903	65	1·4	7·3
1904	42	·9	5·4
1905	62	1·4	7·5
1906	67	1·5	8·5
1907	47	1·0	5·7
1908	68	1·5	7·7
1909	78	1·6	9·3
1910	67	1·4	9·0

The above figures show that during the decennium 1900-1909 the deaths from Phthisis amount to 7·6 per cent. of the deaths from all diseases. During these years there have been 646 from Phthisis alone, or an average of 64 per annum.

Under the Public Health (Tuberculosis) Regulations there have been notified:—

30 Cases on form A.

5 " " B.

10 " " C.

These patients are all under the Poor Law. Under Voluntary Notification, for which the Health Committee pays 2/6 per case, 53 cases were notified.

For pauper cases notified on Form B, and for such of the Voluntary Notifications as their medical attendant desired, rooms have been cleansed as follows:—(1) For patients suffering from Phthisis 6 rooms have been disinfected by

brushing the walls and ceiling with chlorine solution, 10 rooms by rubbing the walls with dough; (2) in houses where death has occurred 10 have been cleansed with chlorine and 19 with dough. A total number in all of 45 rooms. In addition, leaflets of advice have been given. In all cases of paupers, and in voluntary cases where desired, three visits have been made by myself or the Health Visitor to advise as to spitting, disinfection of rooms, &c. It has not been possible to disinfect the rooms more than once in the year by our staff, but in several cases the patients themselves have rubbed the walls with dough later on. Printed notices with reference to spitting have been distributed to all Public-houses, Common Lodging-houses, and Public Urinals. The habit of indiscriminate spitting is very common. Difficulty is found in dealing with cases of paupers in Common Lodging-houses. They are notified on Form B as having removed from the Workhouse to a certain Lodging-house. On inquiry they are often not known to be there, or if they have arrived only stay a short time. If again they stay a longer time it is difficult to exercise any supervision over them. Another difficulty has been found in several cases where a pauper father, in advanced stage of Phthisis, is living with his family of several young children in a small and dirty house. The children are probably being infected, yet the father refuses to go to the Workhouse Hospital, and the Guardians cannot compel him. It is unfortunate that the Corporation have no provision of any kind for Hospital or Sanatorium Treatment for Consumption.

It is calculated that the total number of persons suffering from Phthisis in any place is about five times the number of those who die from the disease during the year. Calculated in this manner we find there were 67 deaths in Ashton during 1910, therefore there would be approximately 335 suffering from the disease. There is no doubt that in this number there must be many who could be cured by sending early to a Sanatorium, and a number of others who should be provided for in Hospital to prevent them infecting their families. This brings us to the fact that only 53 cases in all were notified during the year, showing that the greater number are unknown to the Health Department, and their rooms are constantly in an infective state. In order, therefore, to give anything like adequate treatment, from a public health point of view, it would be necessary to institute

(1) Compulsory Notification.

(2) Sanatorium Treatment.

It should be noticed that the number of deaths for 1909 and 1910 is above the average for the past ten years. The average for the past ten years is 64 deaths per annum. In 1909 there were 78 deaths and in 1910 there were 67 deaths. The proportion of Phthisis deaths to deaths from all other causes has also increased, being 1·7 above the average in 1909 and 1·4 above the average in 1910.

MEASURES TAKEN FOR THE PREVENTION OF INFECTIOUS DISEASE.

Isolation.—Of the Infectious Diseases notified during the year, 42 cases of Scarlet Fever were removed to the Borough Isolation Hospital, and 5 cases of Enteric Fever to Oldham Isolation Hospital. These cases constituted 21 per cent of the total notified.

A suspicious case of Measles was reported to me from a school. On visiting at the house, no medical man had been called in, and the case was found to be one of scarlet fever. The parents at once called in a doctor. A case of scarlet fever occurred on premises where there was insufficient accommodation. Removal to hospital being opposed, a Magistrate's order was obtained, and removal enforced.

Borough Isolation Hospital.—During the year, 48 cases of Scarlet Fever have been treated here. Of these, 36 came from houses in the Borough, 6 cases from the Workhouse, and 1 from Stalybridge. The average duration of each was 44 days; the shortest time being 31 days, the longest 80 days. Of these 20 were males, 28 females. The youngest was a baby of 5 months, the eldest a woman of 23 years. The cases were nearly all of very mild type. There were no deaths. Of the 48 cases, there were:—

- 6 with severely ulcerated throat.
- 3 with discharge from both ears.
- 4 " " one ear.
- 1 with rheumatism in wrists, ankles and jaws.
- 1 with albuminuria and dropsy.
- 1 with albuminuria.
- 1 with diarrhoea.
- 1 was probably a case of paralymphoid.
- 1 on the 17th day after admission developed a secondary rash and vomiting.

The number of cases isolated for the past four years, is as follows : —

1907 was 41 cases.

1908 " 40 "

1909 " 41 "

1910 " 48 "

Disinfection — Several schoolrooms have been sprayed with Kerol solution during the prevalence of measles.

For phthisis, 45 rooms have been disinfected, by rubbing with dough or brushing with chlorine solution.

In other infectious diseases the rooms have been disinfected in the routine manner, with sulphur or formalin.

An enquiry was held by Courtney Clifton, Esq., on September 28th, on behalf of the Local Government Board, for permission to borrow £1,000, to erect a Steam Disinfecting Station at the Town's Yard. This being granted, the work is to be proceeded with immediately.

(b) An account of all general and special inquiries made during the year.

(1) A nuisance arising from noxious fumes, emitted from the premises of the Ashton Chemical Company, Grosvenor Street. Complaints were made by people living in the neighbourhood that the smell caused by these works was very objectionable, and that it necessitated the bedroom windows being kept closed during the night. When the wind was favourable the smell was noticed as far away as a quarter of a mile. The firm in question obtain ammonia from the gas liquor produced at the Ashton Gas Works. This liquor is conveyed from the Gas Works in barrel carts. On arriving at the Chemical Works it was discharged into store tanks by opening the tap of the barrel and running the liquid along an open trough into the tanks. It was whilst this was being done that the nuisance complained of occurred.

The firm was advised to discharge the liquor in question, from the barrel to the tank, by a closed connection, and also to conduct the air displaced from the store tanks over a furnace fire. This was carried out, and, since then, the nuisance has ceased to exist.

(2) A nuisance caused by the emission of smoke and dust.

In the month of April a complaint was received from persons residing in the neighbourhood of the Ashton Gas Works of a nuisance arising from the emission of dense black smoke and dust from the building containing the retorts.

This occurred at regular intervals when the retorts were being charged with coal. The smoke was so dense that smuts of soot floated into the shops and houses near by. It was found that the Gas Company was replacing the old retorts, which were charged by hand, by new ones, to be fed by an automatic stoker. This automatic stoker runs upon rails, and is placed opposite the retort to be charged. The retort door being opened, the coal is ejected at high pressure from the stoker across an intervening open space of some two feet. This process was immediately followed by the emission of black smoke and dust, which found its way through the open windows into the surrounding houses, as above mentioned.

The Company have now fixed two large square ventilating shafts on the highest part of the roof. The nuisance has abated since this was done.

(3) An inquiry into some cases of Ptomaine Poisoning.

On June 26th I was informed that several cases of Ptomaine poisoning had occurred, due apparently to the eating of brawn and meat pies, purchased from a shop in the Borough. On enquiry it appeared that at least five persons had been markedly affected, four from eating brawn and one from eating a meat pie. The symptoms caused were severe colicky pains, diarrhoea and vomiting, coming on within a few hours of the eating. Fortunately they passed away in the course of a day or two, and the patients have now all recovered. The cause would appear to have been the brawn and jelly from the brawn which was put into the meat pies.

On visiting the shop there was neither brawn nor pies left, all had been sold, nor could any be obtained elsewhere. The premises where the meat was prepared were clean, and not exposed to dust from the street, unless the door is kept wide open, which it probably is during hot weather. The mincing machine was in clean condition. The brawn is sold from the counter of the shop, where probably dust blows in upon it from the street. Every week they manufacture and sell about forty pounds of brawn and sixty meat pies at this shop. The weather on June 22nd and 23rd, when the brawn in question was being sold, was very hot and sultry.

(c) An account of the work performed by the Inspector of Nuisances during the year, including a statement supplied in pursuance of Article XX. (16) of this order.

During the year a large amount of work has been carried out by the Inspector of Nuisances. All the smoke observations are carried out by him and his assistant. The results of these are set out in a table following. He takes all samples of foods and drugs, and where a prosecution follows carries the same through the court. An account of these is given under section (d). All further details of the work are supplied by him in these tables now following.

- (a) During the year 3,654 inspections have been made, details of which are given in the summary on page 55.
- (b) Number of Statutory Notices served 215
Number of Informal Notices served..... 594
- (c) Number of Nuisances abated 1606

Four persons have been proceeded against for failing to comply with the notices served upon them for the abatement of nuisances.

(d) A statement as to the conditions affecting the wholesomeness of the milk produced or sold in the district.

During the summer I made a special examination of our milk farms, and presented the following report upon the same :—

There are six milk farms situate within the Borough. Two of these are at the present time disused. The remaining four possess eight cowsheds, housing 46 cows, or an average of six cows per shed. In reviewing the present state of these eight cowsheds it will be well to remember what a good cowshed should be like. A sanitary cowshed may reasonably be required to possess the following points :—

- (1) Good and sufficient lighting, in order to show when it is dirty. By sufficient light is meant about three square feet of window per cow.
- (2) Free ventilation by openings properly placed to let in fresh air, and one or more outlets in the roof to let out foul air. Foul air tends to promote Tuberculosis in cows.
- (3) Flooring well laid, so that the cows seldom lie in their excreta; also sloped and channelled to properly trapped drain inlets situate outside the cowsheds.
- (4) The stalls so arranged that the cows breathe into ventilated passages, and not directly on to the walls; the space at the rear of the stalls sufficiently wide to prevent the splashing of the walls with cow dung; the surface of the walls fairly smooth.

- (5) Good and sufficient water supply in the cowshed itself.
- (6) The dung-pit sufficiently removed, to prevent entrance of effluvia from it to the cowshed at any time.

I have examined each of our eleven cowsheds, keeping in view the above points, with the following results :—

In the first place to consider them generally. Almost all of them are old buildings, and more or less defective. The structural condition in eight is fairly good; in three, which are at present not occupied, it is bad.

Cubic space and overcrowding. The minimum cubic space considered to be allowable varies with different authorities from 600 to 800 cubic feet per cow. If we take 600 cubic feet as a minimum, then every one of the cowsheds is overcrowded. Mr. Morris found the most space given was 489 cubic feet, and the least was 312 cubic feet. At the same time the window area varied from $\frac{3}{4}$ square foot to $4\frac{1}{2}$ square feet per cow. The lighting was remarkably poor in five cowsheds.

I suggest that a cubic space of 600 cubic feet per cow be required as a minimum. Ventilation is insufficient in three. The floors are in poor condition in several cases, consisting of brick and flags badly jointed, making it impossible to cleanse them thoroughly. In three cases they are very bad. The drains run in two cases to a cesspool in the yard; in a third to an open ditch. The rest are drained to the town's sewage system. Drain gullies in six cases are placed inside the cowsheds.

The bedding used is shoddy, except in one place, where wood turnings are used, because they are considered more cleanly, and do not tread into the house.

The whitewashing of the walls and stalls is done twice a year. The stalls are so arranged that the cows breathe directly on to the walls, and not into a ventilated feeding passage, as is more desirable.

The hay is not kept over the cowsheds, but usually in a separate building, so that it is not liable to pollution.

The water supply is good in quality, being in all cases town's water. In several instances the tap is in the yard, or in another shed.

Manure disposal. In one farm it is heaped on the ground close to the shed door; in another the pit is only three yards from the shed, and requires re-constructing.

Taking next the farms individually, we have—

- (1) This has not been occupied by cows for the past twelve months. Its general structural condition is bad. There are two cowsheds. The lighting in each is insufficient; the floor is of brick and flag, and in bad condition; the drain gully in each is placed inside the shed; the walls are wooden and dirty; the yard is in a bad condition, and contains a pigstye without any drain, the manure from which flows on to the land surface adjoining. I suggest this farm be condemned as unfit for further use.

(2) This has not been occupied by cows for the past five months. The structure is poor, the floor is in bad condition, the drain gully opens inside the cowshed, and ends ultimately in a ditch. I suggest this cowshed be condemned as unfit for further use.

(3) Has one cowshed, housing seven cows. Area per cow, 479 cubic feet. The light is insufficient, window area being $1\frac{1}{4}$ square feet per cow ; the ventilation is poor ; the floor is of brick, badly jointed, but well sloped and channelled ; the water tap is in the yard ; the gully drains to a cesspool, which also receives urine from a stable. This is emptied once a fortnight. The dung-pit is in the yard, immediately beneath an opening into the shed. I suggest that the ventilation be improved by making the two windows to open and putting a ventilating outlet into the roof; also that a new window be made for more light.

(4) Has three cowsheds, housing twelve cows. The buildings are in fairly good structural condition.

In shed I., area per cow is 441 cubic feet ; window area per cow is 3 square feet.

In shed II., area per cow is 487 cubic feet ; window area per cow is 2 square feet.

In shed III., area per cow is 312 cubic feet ; window area per cow is $4\frac{1}{2}$ square feet.

Ventilation is insufficient ; the drain gullies are trapped and outside; the dung-pit is badly constructed and close to the cowshed door. I suggest the provision of more ventilation in each shed and moving the dung-pit farther from the cowshed.

(5) Has three cowsheds, one used only in the winter time.
Twelve cows are housed.

In shed I., area per cow is 426 cubic feet; window area per cow is $1\frac{1}{3}$ square feet.

In shed II., area per cow is 437 cubic feet; window area per cow is $\frac{3}{4}$ square foot.

The light in one shed is insufficient and in another there is no outside window at all. The floor in one is in bad condition, composed of setts unevenly laid. The drain gully in two sheds is placed inside. I suggest that in one shed a new window be made, the gully be removed outside, and the floor be reset. That in the other shed a new window be made and the gully placed outside.

(6) Has two cowsheds, housing 15 cows. The buildings are in fairly good condition.

In shed I., area per cow is 489 cubic feet; window area per cow is 2 square feet.

In shed II., area per cow is 434 cubic feet; window area per cow is 3 square feet.

In one the drain gully is inside. The dung is put down in the yard, close to the door of the cowshed ; some loads had accumulated on the date of inspection. I suggest that the drain gully be placed outside, and a dung-pit be constructed at a proper distance from the cowsheds.

After a visit and inspection by yourselves the suggestions made in the report were directed to be carried out.

In the month of December the following report was presented upon the Dairies of the Borough :—

During the month I have inspected the dairies situated in the Borough. These are eight in number. In four of them the buildings and general conditions are quite good. In one notice was given to remove two drain gullies from the inside and relay a portion of the floor. This has already been carried out. In another, also, notice was given to remove two drain gullies from the inside of the storage cellar. This will be done shortly. In a third the building under present conditions is unsuitable for use as a dairy.

The milk from each of the dairies is delivered to customers by horse and float, one also sends it out in dandies. Six of them retail milk over the counter in the shop, where it is kept in a large mug usually having a wooden cover to keep out dust. Three also sell other articles, as mineral water, butter, eggs, and vinegar. The milk is usually strained at the dairies as well as by the farmers who supply it. The total amount of milk sold daily by these dairies is 1153

gallons a day. A list has been made of the various farms from which this is supplied. In addition to this milk is brought into the Borough by milk farmers living in the immediate neighbourhood. The amount so brought in I estimate at 640 gallons per day. Added to the quantity distributed by the dairies, this gives a total of about 1,800 gallons per day. In view of the importance of cleanliness of milk, a leaflet of directions has been sent to each of our milk farmers, and another simple leaflet on the storage of milk is given by the Health Visitor to each mother she visits.

Instructions have been given to the Dairy mentioned above as unsuitable to carry out certain structural alterations.

Arrangements have also been made with your Veterinary Surgeon to examine, once every six months, each of the cows kept in the Borough, a special examination with Tuberculin to be made if considered necessary. By this means it is hoped to obtain from these cows a pure milk, free from tubercle.

Two applications for a license to sell milk during the year have been refused, in each case on the ground that the buildings suggested for use were unsuitable. In one case the application was to store milk and also sell some retail, in the other to store and also separate milk.

During the year eight samples of milk, purchased from milk carts selling in the Borough, have been submitted to Professor Delépine. They were all found to be free from tubercle.

Under the Sale of Food and Drugs Act 43 samples of milk were submitted for analysis. Of these five were found to be below the standard, and legal proceedings were taken, with the following results:—

				Fine
				<i>£ s. d.</i>
1	Deprived of fat to the extent of 10 per cent..			5 2 0
2	"	"	40	5 2 0
3	"	"	16	5 2 0
4	"	"	10	5 2 0
5	"	"	96½	18 1 0

In the last case fines were inflicted for (a) supplying an article not of the nature and substance demanded, (b) for not having the correct address upon the cans, (c) for not having the cans labelled skimmed milk.

MUNICIPAL MILK DEPOT.

The amount of milk and cream sold again shows a marked increase upon last year. There is also an increase in the number of infants which have been fed upon the Modified Milk for a longer or shorter time.

AMOUNT OF MILK USED.

	Quarts	Quarts Sterilised.	Quarts Modified.	Average number of Infants taking Modified Milk.
1903	20936	16736	5468	36
1904	24488	20755	5684	39
1905	27204	22275	5950	42
1906	27036	22006	5480	41
1907	41496	37376	4463	43
1908	44696	40087	5204	44
1909	50128	44582	5776	46
1910	59983	53974	6128	49

YEARLY RECEIPTS AND EXPENDITURE.

	Receipts.			Expenditure.		
	£	s.	d.	£	s.	d.
1902	266	3	0	353	3	6
1903	313	13	4	560	5	1
1904	350	8	0	590	9	6
1905	431	8	3	658	5	0
1906	414	4	9	713	11	5
1907	449	5	11	558	11	11
1908	716	16	6	865	6	0
1909	855	16	5	965	5	10

The milk has been regularly tested for butter fat, and the results have been most satisfactory. The average test by Gerber for the twelve months was 3·4.

A Sterilizer for the manufacturer of Bulgarian Soured Milk has been in use at the Depot for several months. This milk is supplied almost entirely under the prescription of Medical Men. Teats to fit the Modified Milk Bottles are supplied at a small cost, and have been much appreciated.

Cream.—The amount of cream received was 824 quarts. Of this amount 7660 ounces has been used in the manufacture of modified milk; 2530 ten-ounce bottles have been sold.

(e) A Statement as to the conditions affecting the wholesomeness of foods for human consumption, other than milk, produced or sold in the district.

Samples of foods and drugs numbering 63, were purchased during the year, and submitted for analysis. They were found to be all genuine.

The Meat of the Borough was examined by Mr. New, Veterinary Surgeon to your Committee. A consignment of 157 lbs. of Pork was submitted for his inspection by the dealers, and on being pronounced unfit for food was sent to the destructor and burnt.

The Local Government Board Model Bye-Laws for Slaughter-houses have come into action during the year. All Slaughter-houses have been surveyed, and certain of the owners called upon to make structural alterations. A building behind 70, Oldham Road has been licensed as a slaughter-house under Section 29 of the Public Health Acts Amendment Act, 1890, certain improvements having been previously carried out. A license was applied for in regard to a slaughter-house in Angel Yard. Subject to certain specified alterations being made, this will be granted.

During November I made a survey of the Bakehouses in use in the Borough, and directed the following improvements to be carried out :—

- (1) Three slop-water gullies to be removed to the outside of the building.
- (2) One outside gulley to be put into good repair.
- (3) A plumber's trap to be placed on the waste water pipe of a sink, in three instances.

Two underground bakehouses have been disused, and the baking is now carried on in the basement of the building.

(f) A statement as to the sufficiency and quality of the water supply of the district and of its several parts, and in areas where the supply is from waterworks, information as to whether the supply is constant or intermittent.

The water supply is furnished by the Ashton-under-Lyne, Stalybridge and Dukinfield Waterworks (Joint) Committee. The reservoirs are situated at Swineshaw and Greenfield. The gathering ground is moorland. The water is very pure and soft. A detailed description of the different works and gathering grounds is given in the Supplement to the thirtieth Annual Report of the Local Government Board.

	Swineshaw.	Greenfield.
Total rainfall for 1910 =	51.85 in.	54.52 in.
, , , 1909 =	53.20 in.	51.00 in.

This shews an increase of 3.52 inches at Greenfield, and decrease of 1.35 inches at Swineshaw.

The rainfall for 1910, as taken at the Stamford Park each month, was as follows:—

January.....	5.00 in.	July	4.46 in.
February	4.07 ,,	August	4.95 ,,
March	—	September ...	0.32 ,,
April.....	3.79 ,,	October	3.33 ,,
May	3.17 ,,	November.....	4.50 ,,
June	3.66 ,,	December.....	3.23 ,,

The number of days rain was, at Greenfield 175; at Swineshaw 177. The amount of water consumed was, from:—

Swineshaw.....	73,095,000 gallons.
Greenfield	479,396,000 ,,
Total	<u>553,491,000</u> ,,

This was supplied to the areas of Ashton, Limehurst, Hurst and Augenshaw, with a total estimated population of 71,883.

Mr. Buckley, Secretary to the Waterworks Department, who has kindly given me much information, estimates the daily supply of water per person at 25 gallons. The water is not stored in reservoirs, there is a constant inflow and outflow. The water is not filtered at present. The supply is constant. A new reservoir is in course of construction at Greenfield, to hold 174 million gallons.

During the year samples of drinking water were tested for lead—25 taken from cold water taps, 6 from hot water taps. Of those taken from the cold water taps, 3 shewed slight acidity, but no lead was present in any. Of the 6 taken from the hot water supply, three showed a marked quantity of lead. It is evident that anyone drinking water from the hot water tap in such cases as the three in question, would run a decided risk of lead poisoning. The matter was freely discussed in the local press, and an advertisement pointing out the danger, was inserted in the same.

(g) A statement as to the pollution of rivers or streams in the district

The only river in the area is the Tame, which receives practically no pollution from our borough. A small stream runs into it on the east, forming part of our easterly boundary. This is free from pollution. Through the centre of our area formerly ran a stream known as Hurst Brook and Jeremy Brook. This stream has been culverted and now forms a portion of the main intercepting sewer.

(h) A statement as to the character and sufficiency of the arrangements for the drainage, sewerage, and sewage disposal in all parts of the district.

The Sewage Disposal Works are situated at Plantation Farm, and treat the sewage of Ashton, Hurst, and a small portion from Limehurst Rural District. The population connected up is 53,900. The approximate dry weather flow is two million gallons. The district is drained by pipe sewers, varying from 9 to 18 inches in diameter, and egg-shaped brick sewers, 36 by 24 inches. The main outlet sewer is 4 feet by 4 feet 6 inches. The sewers are ventilated by manholes and lamp holes. Every house is drained, generally by means of a yard drain. All house drains are disconnected from the sewers by syphon traps.

The report of the Chief Inspector to the Mersey and Irwell Joint Committee states that two samples were taken above limit, and five below limit.

By the kindness of Mr. Stamp, Manager of the Works, I am informed that during the year they have finished cleansing the filtering material in the first and second contact beds and the greater part of the same in the storm water beds. The sludge cake produced is about the same amount as previously.

In the month of January seven barrels of oil were found to have been put into the sewers.

Mr. Stamp also reported "I have taken nine samples of the waste liquor run into the sewers by the Ashton Chemical Company. I have tested these by the four hours oxygen

absorbed test, and find that the lowest is 278, the highest 561 grains of oxygen absorbed per gallon. These are very bad samples." In reply the Company promised to put down a plant to remedy the matter. It may be noted that this is the same firm who committed a nuisance, by emitting foul smells from their premises, as noted under section (b).

In consequence of complaints made of foul smells arising from the manholes of the sewers in certain of the public streets, I was desired to make a report upon the matter. The house-holders in question not only complained of foul smells, but also alleged that certain cases of sore throat and diphtheria were due to the nuisance. In several instances the manholes in question had been closed, although this policy of closing, without providing other means of egress for the foul air, only results in greater offensiveness in the adjacent manholes, with the risk of forcing the foul air through the traps in the near neighbourhood. The report is too long to reproduce here, but the conclusion may be given. Does any harm to health result from sewer air constantly filtering into a house by the open joints of defective down-spouts, connected directly with the sewers as ours are? Judging from experience, I consider this may cause sore throats and a general feeling of ill health. All such joints, therefore, should be kept in sound condition, to prevent leaking.

The ventilation of our sewers is effected by:—

- (i) Manholes and lamp holes in the centre of the roadway, to act as inlets for fresh air.

(2) The large majority of the down-spouts which run directly into the sewers. These act as outlets for sewer air. In my opinion it is a source of danger to the occupiers of the houses, that the down-spouts for rainwater, ending immediately under the eaves of the houses, should be connected directly with the sewers and act as sewer ventilators.

(i) A statement as to the privy, water-closet, and other closet accommodation in the district, including information as to the approximate number of each type of privy and closet.

There are no privies in the district, 24 pail closets, and 3,021 water closets. The remaining 8,007 closets are tippler or waste water type. The drawback, of course, to these, is that the inside of the shaft, leading to the sewer, becomes foul, since it is not flushed.

The Inspector of these closets has been instructed to give special attention to the cleansing of these.

(j) A statement as to the character and efficiency of the arrangements for the removal of house refuse, and the cleansing of earth closets, privies, ashpits, and cess-pools in the District.

All the arrangements for this are under the direction of a Special Cleansing Department. Each house has a shallow wooden tub for the depositing of ashes and dry refuse. The contents of these are taken to the Destructor and there

burned. The Destructor not being able to deal with the whole of this, 2,999 loads of dry ashes were deposited on Tips during the year.

The condition of the Horse Manure Pits is in many cases very unsatisfactory. Many have no pits whatever, and pile the manure against a wall, or, if manure pits are present, they are of a tumble-down character. Special attention is, therefore, being given to this matter.

(k) A statement with regard to the housing accommodation of the District as required by Article V. of the Housing (Inspection of District) Regulations, 1910, and an account of any other action taken by the Council under the Housing, Town Planning, &c., Act, 1909, bearing on the Public Health.

BUILDINGS UNFIT FOR HUMAN HABITATION.

These are dealt with under the following Special Bye-Law :—" In any cases where it is certified to the Council by the Medical Officer of Health of the Borough, by the Borough Surveyor, by the Inspector of Nuisances, or by any two Medical Practitioners that any building or part of a building is unfit for human habitation, the Council may cause a notice of such certificate to be served on the owner or occupier of such building, and appoint a time for him to appear and answer the same before them; and upon such appearance, or in default of such appearance, may, by their order affixed conspicuously on the building or part of the building, declare the same is not fit for human habitation; Provided always that if at any time after such order has been made the Council

shall be satisfied that such house has become or been rendered fit for human habitation, they may revoke their said order, and the same shall thenceforward cease to operate."

This method operates very well, and obviates appearance before a magistrate. The drawback is that no order can be made for demolition of old property which is empty and ruinous, as is provided for in the Housing, Town Planning, &c., Act, 1909.

Under the above Act Regulations were issued in September, 1910, which provide, among other things, that (a) the local authorities shall, as part of their procedure, make provision for a thorough inspection to be carried out from time to time, according to the varying needs or circumstances of the dwelling-houses or localities in the district of the local authority. (b) The local authority shall cause to be prepared from time to time, by the Medical Officer of Health, or by an officer designated by them, but acting under his direction and supervision, a list or lists of dwelling-houses, the early inspection of which is, in the opinion of the Medical Officer of Health, desirable.

During the year the following houses were certified as unfit for human habitation :—5, 7, 9, 13, 2, and 6 Pot Yard Lane, 4 Enville Street, 9 Old Cross Street. The owners of these appeared before your Committee, and have made arrangements for altering the property to your satisfaction. This property is situate in one of the oldest parts of the town. The rooms are small, ceilings are low, and there is no through ventilation.

A small house, situate within a Court behind 23 Church Street, was represented to the owners as being obstructive to the air space and ventilation of the Court. Towards the end of the year it was demolished by them, and the site left open, to the great improvement of the said Court.

During the year I inspected the Houses let in Lodgings or occupied by members of more than one family in the Borough. These also go by the name of Furnished Rooms, or one-roomed houses. The Bye-laws made with respect to them require an air space of 600 cubic feet for each adult and 300 cubic feet for each person of an age not exceeding ten years. They are occupied usually by two adults or an adult and a child. In one room there is living a man suffering from consumption, his wife, and cripple child. They are situated in Crickets Lane and in or about Pitt Street, Charlestown. Those in Crickets Lane are large and well lighted, whereas the Pitt Street rooms are small and dingy. The single rooms thus occupied are 23 in number. Under the same heading we class three small houses having one room upstairs and one downstairs, also one house with four small rooms, two upstairs and two downstairs, because they are let furnished. All the four latter are old back-to-back houses, having no through ventilation. Only one of the single rooms has a back doo^r, allowing a through ventilation. The rents are 6d., 7d., and 8d. a night, according to situation and size—for example, some rooms having a front view into Pitt Street are 7d., whilst others, looking on to the back, are 6d. a night. Number 14, Pitt Street, is a back-to-back house, let in rooms.

The supply of water for drinking and washing is fairly good throughout. The closet accommodation consists of four town's water closets, and the rest waste water closets. In two cases these waste water closets were found to be in a filthy condition. Most of the rooms were tolerably clean, but in three the floors and surroundings were dirty, and in four the bedding was dirty. The coal and ashes are kept on the floor in one corner of the room. This I discussed with the landlord, who promised to provide some cheap boxes for the purpose. In ten single rooms the window was found to be fixed. Notice was served in each case to make some part of the window moveable, so as to admit fresh air. In most of these cases this has already been done. The staircase at 100, Crickets Lane, is very dark. At 11, 13, 15, and 17, Pitt Street, the staircases are both dark and confined; in case of fire they would be dangerous. Notices cautioning against the bad habit of spitting are now posted in each of the rooms. Speaking generally, these Furnished Rooms are now in as good a condition as it is possible to put them, though at the best they are very undesirable places to live in, especially when, as in one, a man in an advanced state of consumption is living, eating, and sleeping in one room along with his wife and child.

The number of Inhabited Houses and Empty Houses is shown below:—

Ward.	No. of Houses.	Empty.
Portland Place.....	1954	39
St. Peter's.....	3537	48
St. Michael's	1462	31
Market	3504	63
	—————	—————
	10457	181
Deduct empty	181	—————
Inhabited	10276	

In comparison with last year there are 20 new houses, but the empty houses number 181, whereas in 1909 there were only 149 empty. There is in different parts of the Borough a large number of unpaved back passages behind the dwelling-houses. These accumulate water and refuse, and are often in an insanitary condition. A survey of these has been made by our department during the year and duly presented and referred by you for the consideration of the Highways Committee.

(l) A statement as to the vital statistics of the District, including a tabular statement, in such form as we may from time to time direct, of the sickness and mortality within the District.

POPULATION.

The estimated population for the middle of the year was 46,514, or an increase of 289 over the population of the previous year.

The natural increase of the population for the year, that is, the excess of births over deaths, was 336.

The difference between this last number and estimated increase of population is accounted for by the fact that there was probably some emigration elsewhere owing to the bad state of the staple trade.

MARRIAGES.

The number of marriages celebrated was 533, or a rate of 11·4 per 1,000 of the population.

BIRTHS.

There were 1093 births registered in 1910, 575 being males and 578 females, giving a birth rate of 23·4 per 1,000 of the population. This is an increase upon the previous year of 24 in the number of births and 0·3 per 1,000 in the birth rate.

The rates for the previous ten years were as follows—

1900—27·4	.....	1905—26·3
1901—24·8	.....	1906—26·5
1902—27·8	.....	1907—26·7
1903—26·2	.....	1908—26·7
1904—27·0	.....	1909—23·1

It will be thus seen that the rates for the past two years are the lowest recorded.

The birth rate for the 136 small towns, among which we are ranked, was 23·7. Our rate is, therefore, 0·3 below the average.

As regards the decline in the birth rate generally, the Registrar-General observes, "There are sufficient grounds for stating that during the past 30 years approximately 14 per cent in the decline of the birth rate (based on the proportion of births to the female population aged 15—45 years) is due to the decrease in the proportion of married women in the female population of conceptive ages, and that over 7 per cent is due to the decrease of illegitimacy. With regard to the remaining 79 per cent of the decrease, although some of the reduced fertility may be ascribed to changes in the age constitution of married women, there can be little doubt that much of it is due to deliberate restriction of child-bearing." After inquiry, I am of opinion that "deliberate restriction of child-bearing" accounts for a part of the fall in the birth rate in our District.

BIRTH RATE IN WARDS.

	St. Peter's.	Portland.	Market.	St. Michael's
Number of Births	344	253	334	123
Birth Rate	23·0	29·0	22·1	18·4

There were 52 births registered as illegitimate.

Under the Notification of Births Act we have received notice of 967 births, or 88 per cent of the whole.

DEATHS.

The total number of deaths registered was 978. Of these 241 were non-residents. The total number of deaths of Ashton people was, therefore, 737. Of this number 383 were

males and 354 females. Of the 241 non-residents 162 died in the Workhouse and 79 in the Infirmary. The death rate, corrected for residents and non-residents, was 15·8 per 1,000 of the population. This is the lowest death rate recorded for the Borough. The lowest rate previously was 17·2 in 1904 and 1906. The death rate for 1910 was, therefore, 1·4 less than ever recorded before. The corresponding rate for the small towns was 12·9. Of the 737 deaths of Ashton people 183 were in the first quarter of the year, 186 in the second, 158 in the third, and 207 in the fourth.

DEATH RATE IN WARDS.

	St. Peter's.	Portland.	Market.	St. Michael's
Number of Deaths	198	147	193	68
Death Rate	13·2	16·8	12·7	10·1

ACUTE LUNG DISEASE.

From bronchitis, pneumonia, and pleurisy 125 deaths were registered, against 176 for 1909, 159 for 1908, 185 for 1907, and 162 for 1906. From bronchitis there were 88 deaths, giving a death rate of 1·8 per 1,000 persons living, whilst from pneumonia there were 35 deaths, or a rate of 0·7. From respiratory diseases generally there were 51 less deaths than in 1909.

CANCER.

There were 44 deaths registered, giving a death rate of 0·9 per 1,000, as compared with 0·6 for 1909 and 0·7 for 1908.

NERVOUS DISEASES.

From the various nervous diseases there were 57 deaths, a rate of 1·2 per 1,000, as compared with 2·0 in 1909, 2·5 in 1908, 2·4 in 1907, and 1·2 in 1906.

CIRCULATORY DISEASES.

There were 77 deaths, or a rate of 1·6 per 1,000, compared with 1·7 for 1909, 1·6 for 1908, 1·3 for 1907, and 1·6 for 1906.

Mortality from Special Diseases.—Diminution and Excess.—The following table shows the greater or less fatality of disease in 1910, as compared with their simple septennial average numbers in the Borough:—

Cause of Death.	Diminution in 1910.	Excess in 1910.
Measles.....	8	...
Scarlet Fever	5	...
Whooping Cough	—	25
Diphtheria	5	...
Enteric Fever	—	3
Diarrhoea	18	...
Enteritis	6	...
Puerperal Fever	—	—
Phthisis.....	—	6
Cancer	—	14
Bronchitis.....	11	...
Pneumonia	23	...
Other Respiratory Diseases.	12	...
Cirrhosis of Liver	4	...
Premature Birth.....	1	...
Heart Diseases	11	...
Suicides.....	—	—
All other causes	16	...
	—	—
	120	48
Balance of Diminution	72	—

DEATHS AT VARIOUS AGES.

Under 1 year	1 to 5 years	5 to 15 years	15 to 25 years	25 to 65 years	65 years and over
162	86	26	31	271	161

The inquests held during the year numbered 38. The causes of death are given among the Tables.

Uncertificated deaths numbered 6.

Violent deaths, accidental or otherwise, numbered 23, or an annual rate of 0·4 per 1,000 of the population.

Infant Mortality.—The number of deaths registered under one year of age was 162, giving a death rate of 148·2 per 1,000 births. This is a decrease on the previous year of 16·4, when the rate was 164·6. It is 19·1 below the average for the preceding five years, which was 167·3.

The Infantile Mortality for the smaller towns was 104.

INFANTILE MORTALITY RATE IN WARDS.

St. Peter's	Portland	Market	St. Michael's.
142·4	169·9	161·6	89·4

It will be noticed that the highest death rate occurs in Portland, which is the most crowded of the Wards. Contributory causes, no doubt, are the foul state of the inside of the pedestals in many of the tippler closets, and the dirty condition of many of the back passages.

Another cause is the ignorance of mothers in the elementary matters of feeding, washing, and clothing children.

Of the Infantile deaths 75 occurred under 3 months, or 1 in 10 of the total deaths; 162 occurred under 12 months, or 1 in 5 of the total deaths.

Deaths under 5 years were 248, or 1 in 3 of the total deaths.

The lady visitors of the Ladies' Health Society are doing admirable work in following up the cases after the first visit made to the new-born infant by the official Health Visitor. A large amount of clothing, milk, food, and coal has been given by them to 137 suitable cases during the year. Arrangements have been completed for the opening of a School for Mothers in a suitable room in Church Street during the coming year. The chief causes of death among the infants have been measles and whooping cough. Many of these deaths are due to the careless way in which mothers expose their children to the cold and neglect to get advice.

The Health Visitor, Mrs. Elliott, who has been at work since June 27th, reports as follows for the period June 27th to December 31st :—

Total number of visits, 1,695.

First visits to Infants fed at Breast, 343.

First visits to Infants fed by other methods, 46.

Mothers who worked during pregnancy in the cotton mill.

No. of Mothers who worked.	No. of Months.
2	2
5	3
12	4
19	5
24	6
26	7
17	8
6	9

Five of the last worked right up to the day of confinement.

Others worked some portion or all of their pregnancy at dressmaking 3, as saleswomen 3, shop assistant 1, charring 7.

With regard to the length of time before her confinement that a woman should be allowed to work in the mill the system at present followd seems badly arranged. The custom is for the overlooker (a male) to stop a woman working when she "looks big." Since this appearance is very deceptive, some will work up to the day of confinement, as happened to five in the above list. Whilst others will be stopped three months before confinement occurs, other cases have happened where they were stopped at four months before, and the husband was out of work. The result of this was that the expectant mother was not properly fed, and, moreover, she had to return to the mill as soon as possible after baby was born. This acts on the new-born child badly in two ways. Firstly, the mother's blood being poor, does

not nourish it properly whilst she is pregnant. Secondly, she has to wean it from breast milk, in order to return to the mill. Mrs. Elliott thinks that a reasonable time to stop a mother from working would be six weeks before confinement. It must be remembered that, owing to labour saving contrivances, the work of the women in the mill is much easier than it used to be. She found that amongst the poorest people that about 40 per cent had no change of clothing. The wife put on her husband's shirt whilst washing her own.

Premature births 13, premature stillbirths 15, fullterm stillbirths 8.

2 mothers returned to work when baby was 1 month old.

3	"	"	"	2	"
9	"	"	"	3	"
2	"	"	"	4	"
4	"	"	"	5	"
1	"	"	"	6	"

The babies in these cases were fed—

3 by mothers' milk.

1 by mothers' milk and cow's milk.

2 by modified milk.

4 by cow's milk and barley water.

8 by Nestle's milk.

3 by malt foods.

During the year three cases have been reported to the Society for the Prevention of Cruelty to Children:—

- (a) A girl with inflamed eyes and in need of medical care.
Parents compelled to take her to the District Infirmary. Cured.
- (b) A baby grossly neglected by its drunken mother.
Improvement was obtained. The baby is now doing well, and another child has been operated upon at the Infirmary.
- (c) Eight children, generally neglected with dirt, improper bedding, and clothing. The twin babies are dead.

Crêche.—This excellent institution has been somewhat handicapped by the want of money among the mothers. Nevertheless, the average number of babies taken care of has been about 20. In June and July there were about 30. During the prevalence of measles in the neighbourhood one or two cases occurred among the babies brought. These were promptly dealt with and the rooms disinfected. A special isolation room is provided for any doubtful cases. There is no playground attached, but the children are taken, when the weather is fine, to an adjoining municipal playground. Each child, on arriving in the morning, has a bath, and is put into special clothes. An ordinary feeding bottle is used, with the teat fitting directly on to the bottle. It can hardly be said to encourage premature weaning, as practically only babies are brought which, owing to the exigencies of work, are already weaned. Only one mother came in during the day to suckle her baby, although this is encouraged by giving such mother a dinner for 2d.

During the year the management have organised a school for training children's nurses. Under this scheme the nurse lives in for nine months, and has a course of theoretical and practical training. Nine nurses are now in training, and others are waiting.

Senile Mortality.—Of the total deaths 161, or 21.8 per cent, were of persons 65 years of age or over. The causes of death were:—

Heart Disease...	25	Brain Disease ...	13
Old Age.....	47	Cancer	7
Bronchitis }	29	Other Causes ...	30
Pneumonia }		Ill-defined.....	10

Zymotic Diseases.—The zymotic death rate for the year was 1.7 per 1,000 of the population, as compared with 1.7 in 1909, 1.7 in 1908, and 2.0 in 1907.

The deaths from the various diseases were as follows:—

	1910	1909	1908		1910	1909	1908
Measles.....	12	25	3	Whooping Cough.	39	9	20
Scarlet Fever	2	11	4	Diphtheria	0	14	5
Enteric	8	7	5	Diarrhoea	17	10	44

STATISTICAL SUMMARY, 1910.

Population, estimated to mid-year.....	46,514
Births :—Males.....	575
Females	518
— Total.....	1,093
Annual rate of births per 1,000 of the population..	23·4
Deaths under one year of age per 1,000 births.....	148·2
Deaths :—Males	383
Femalets	354
— Total.....	737
Annual rate of Mortality per 1,000	15·8
Annual rate of Mortality per 1,000 from the seven principal zymotic diseases	1·7
Excess of registered births over deaths	336
Estimated annual increase of population	314

Density of Population.—The mean density for the Borough is equal to 33·3 persons per acre. Area, 1,396 acre.

Elevation.—The mean elevation of the Borough is 414 feet above sea level, and varies between 310 and 519 feet.

HEALTH DEPARTMENT,

TOWN HALL CHAMBERS,

March, 1911.

To the Chairman and Members
of the Health Committee.

Gentlemen.

I beg respectfully to submit to you the following as a summary of the work done by this department during the year ended 31st December, 1910 :—

SUMMARY.

Number of visits to premises <i>re</i> defective drainage, etc.	190
,, ,, overcrowded, dirty, damp and insanitary premises.....	117
,, ,, premises <i>re</i> defective and made up W.C.'s and W.W.C.'s, etc.	690
,, ,, ,, slop sinks, waste and soil pipes	48
,, ,, ,, roofs, troughing and down spouts	61
,, ,, ,, floors, ceilings, and walls..	138
,, ,, ,, <i>re</i> nuisances from keeping of pigeons, poultry, etc.	59
,, ,, single and back to back houses.....	70
,, ,, insanitary yards, and unpaved backs and passages	140
,, ,, offensive accumulations, and insanitary manure pits, etc.	97
,, ,, lodging-houses, furnished rooms, and dwelling-vans	312
,, ,, slaughter-houses and bakehouses ...	207
,, ,, cowsheds, milkshops, refreshment houses and ice cream makers...	263
,, ,, Factory and Workshops <i>re</i> Factory and Workshop Act	155
,, ,, Offensive Trades	38
,, ,, Premises where work is in progress and for the purpose of ascertaining if notices have been complied with	661
Other miscellaneous visits and inspections to nuisances not specified above	65

Total number of houses, premises, etc., visited and inspected	3654
Houses and premises inspected in which no nuisance was found	273
Number of houses certified unfit for habitation.....	8
,, single houses converted into double ones ...	3
,, premises limewashed and cleansed	73
,, drains tested	68
,, smoke observations taken	234
,, street gullys found blocked and reported to cleansing foreman	19
,, Insanitary and overloaded ashtubs reported to cleansing foreman	184
Defective pavement and flagging reported to Borough Surveyor	3
Covered-in yards reported to Borough Surveyor	2
Dangerous buildings reported to ,, 	1
Burst Water Pipes reported to Water Engineer	6
Samples taken under Sale of Food and Drugs Act	106
,, for Bacteriological examination.....	10
Persons summoned for offences under the Public Health Acts	4
,, for offences under the Food and Drug Acts	6
Food submitted for inspection and destroyed ...lbs. pork	157
Animals removed and destroyed under Contagious Diseases (Animals) Act	38
Disinfectants distributed (gallons)	520
,, (cwts.)	50
Lime distributed (7lb. bags)	240

It must be remembered that many nuisances are frequently included under one notice, and therefore, the number of nuisances represent considerably more than the number of notices.

The foregoing Visits and Inspections are exclusive of those made by the Medical Officer of Health and Health Visitor.

A large amount of time is also taken up in preparing the Medical Officer's Reports.

I remain, Gentlemen,

Your obedient Servant,

WILLIAM C. MORRIS, M.I.H.,
Chief Sanitary Inspector.

TABLE C.
SUMMARY OF MEDICAL OFFICER'S REPORT
FOR 1910.

THE URBAN SANITARY DISTRICT OF ASHTON-UNDER-LYNE.

Area in Statute Acres, 1,896.

Population Census 1901, 48,890.

Population Estimated 1910, 46,514.

Name of Medical Officer of Health:—

JOHN WILLIAM TALENT, M.D., D.P.H. Salary £300.

Births registered—Males, 575; Females, 518; Total, 1093

Deaths registered—Males, 383; Females, 354; Total, 737

Number of Illegitimate Births registered 52

Birth Rate 23·4

Death Rate 15·8

Rate of Infant Deaths, under 1 year, to 1000 Births 148·2

Death Rate from the seven principal epidemic Diseases per 1000 of population 1·7

Diseases specially prevalent: Scarlet Fever, Enteric Fever.

Period: Throughout the year.

Any schools closed? No.

What is the character of the Hospital accommodation?

Smallpox Hospital Joint, Fever Hospital belongs to Borough.

Is it Joint or otherwise? Smallpox Joint. No retaining fee.

Number of Beds available for your district ? Twelve for Smallpox, sixteen for other Infectious cases.

Number of cases removed ? Enteric fever, 5, Scarlet Fever, 42. Total 47.

Deaths in Hospital of patients ? None.

How is disinfection carried out ? Houses Sulphur and Formalin; clothing, bedding, &c., by Thresh disinfecter, at Smallpox Hospital. Number of Houses disinfected, 212.

Number of cases of Infectious Disease notified ? 215.

Are any Diseases not specifically mentioned in the Act notifiable (for instance Measles, Whooping Cough, Diarrhoea, Chicken Pox, Ophthalmia Neonatorum, &c.) ? If so, what are they ? Ophthalmia Neonatorum.

Bacteriological Examinations. Number and nature of specimens examined ? 5 for Enteric Fever, 3 for Diphtheria.

Has any arrangement been made for the "voluntary" notification of Pulmonary Tuberculosis ? Yes.

Number of cases of Pulmonary Tuberculosis reported under the Public Health (Tuberculosis) Regulations, 1908 ? 45

Is Diphteritic Anti-Toxin supplied to Medical Practitioners free of charge ? Yes.

Action taken under "The Housing of the Working Classes Act." No. of Houses condemned, 8 ; Defects remedied, 8 ; Demolished, 1. General character of defects found to exist ? No through ventilation.

From where is the Water Supply obtained ? What is its condition ? Water supply good. Is it subject to your inspection ? No.

Is Scavenging carried out satisfactorily? Yes. How performed: By Sanitary Authority? Yes.

How is the Refuse disposed of? Has a Destructor been provided? Yes.

Sewage Disposal Works. Method of treatment? Precipitation and filtration by contact beds. What is the character of the Drainage System? All brick and pipe sewers. Drain Testing, Flushing, &c. All new drains tested and other drains periodically examined.

Action taken with regard to pollution of streams? None

Canal Boats, Number Inspected? No Depot.

What is the condition of the Bakehouses? Good.

Slaughter Houses? Satisfactory. Has a Public Abattoir been provided? No.

Lodging Houses? Much improved during the year. Are they registered? Yes.

What is the sanitary condition of the Schools? Satisfactory.

Dairies, Cowsheds, and Milkshops—Are they periodically inspected? Yes. What is their condition? Fair. Have Regulations been made under the Order of the L.G.B.? Yes. Are they enforced? As far as possible. Amount of air space in cubic feet required for each cow? Average 450 feet.

No. of Cowkeepers? 4 No. on Register? 4.

No. of Dairymen or Purveyors of Milk (other than Cowkeepers)? No. on Register? 106.

Food unfit for Human Consumption—Amount ? 157 lbs.
pork surrendered.

Department of Inspector of Nuisances: No. of statutory notices served ? 215. Nuisances remedied ? 1606.

Closet accommodation of the district: No. of Privy Middens ? None. Pail Closets ? 24. Fresh Water Closets ? 3021. Waste Water Closets ? 8007. No. of Privy Middens converted during 1910 ? to W.C.'s 19. No. of Pail Closets converted to W.C.'s, 8.

Smoke: No. of Observations ? 234. No. of Legal Proceedings and result ? 4. 1 fined 10/- and costs ; 3 ordered to abate and pay costs. What is the time limit allowed for the emission of black smoke per hour ? 4 minutes.

Has the Authority adopted "The Infectious Disease (Prevention) Act, 1890"? Yes. "The Public Health Acts Amendment Act, 1907"? Yes. "The Public Health Acts Amendment Act, 1890"? Yes. "The Notification of Births Act, 1907"? Yes.

Has a Health Visitor been appointed? Yes.

Chief Sanitary requirements of District : Nil.

Factories, Workshops, Workplaces, and Homework.

1.—INSPECTION.

Including Inspections made by Sanitary Inspectors or Inspector of Nuisances.

Premises.	No. of Inspections.	No. of Written Notices.	No. of Prosecutions.
Factories (including Factory Laundries)			
Laundries)	35	3	—
Workshops (including Workshop Laundries)			
shop Laundries)....	97	5	—
Workplaces (Other than Out-workers' premises included in Part 3 of this Report) ...			
	23	—	—
	—	—	—
Total	155	8	

2—DEFECTS FOUND.

Particulars.	Number of Defects.	Number Referred to H.M. Inspector.	Number Remedied.	Number of Prosecu- tions.
<i>Nuisance under the Public Health Acts :—</i>				
Want of cleanliness ...	6 ...	6 ...	— ...	— --
Want of ventilation ...	— ...	— ...	— ...	— —
Overcrowding.....	— ...	— ...	— ...	— —
Want of drainage of floors	— ...	— ...	— ...	— —
Other Nuisances	— ...	— ...	— ...	— —
<i>Sanitary accommodation :</i>				
Insufficient	1 ...	1 ...	— ...	— —
Unsuitable or defective	2 ...	2 ...	— ...	— —
Not separate for sexes..	— ...	— ...	— ...	— —

2.—DEFECTS FOUND (*continued*).

Particulars.	Number of Defects Found.	Number Referred to H.M. Inspector.	Number of Prosecutions.
<i>Offences under the Factory and Workshop Act :—</i>			
Illegal occupation of underground bakehouse (sec. 101) ...	—	...	—
Breach of special sanitary requirements for bakehouses (ss. 97 to 100)	—	...	—
Other offences	—	...	—
Total	9	9	—

3.—HOME WORK.

	Number of Lists.	Number of Outworkers
<i>Outworkers' Lists, Section 107 :—</i>		

Lists received	4	16
----------------------	---	-------	----

Addresses of Outworkers :—

Received from other Councils	0
No. of Inspection of Outworkers' premises	31

4.—REGISTERED WORKSHOPS.

Class.	Number
Bakers, Confectioners	32
Laundry	3
Milliners, Dressmakers, Mantlemakers.....	60
Saddlers	4
Underclothing	3
Brush Makers	2
Plumbers	10

4.—REGISTERED WORKSHOPS (*continued*).

Class.	Number
Blacksmiths, Farriers	6
Tinplate-workers	6
Beer Bottlers.....	5
Tailors	17
Bootmakers, Cloggers	12
Wheelwrights	5
Joiners.....	8
Other Workshops	25
	—
Total number of Workshops on Register ...	198

5.—OTHER MATTERS.

Class	Number
Matters notified to H.M. Inspector of Factories:—	
Failure to affix Abstract of the Factory and Workshop Act (s. 183)	1
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts but not under the Factory and Workshop Act (s. 5) :—	
Notified by H.M. Inspector	8
Reports (of action taken) sent to H.M. Inspector	7
Other	—
Underground Bakehouses (s. 101) :—	
Certificates granted during the year	—
In use at the end of the year	6

DEATHS.

The monthly death rate was as follows :—

January	17·1	No. of Deaths, 183
February	13·7	
March.....	16·7	
April	19·0	Rate for Quarter, 15·9
May.....	17·4	
June.....	11·5	
July	12·1	No. of Deaths, 186
August	14·1	
September	14·1	
October	16·4	Rate for Quarter, 16·0
November	22·2	
December	14·4	

Death rate in each ward for each quarter and for the year :—

Ward	Popula- tion.	Deaths	Quarters	Average
			First Second Third Fourth	
St. Peter's	14936	198	13·5...16·3...11·3...11·4	13·2
Portland Place ...	8718	147	18·0...17·8... 9·5...20·8	16·8
Market	15083	193	11·8...13·2...11·2...14·4	12·7
St. Michael's	6682	68	13·7... 6·4... 9·3...10·6	10·1
			— — — —	— — — —
			14·2	13·4
			10·3	14·3
			—	13·2

Rate of Infant Mortality measured by the proportion of deaths
under one year to Births, in Months and Wards.

Month	Portland			St.	
	St. Peter's.	Place.	Market.	Michael's.	Average.
January	000·0 ...	157·8 ...	272·7 ...	000·0 ...	107·6
February	171·4 ...	50·0 ...	38·4 ...	100·0 ...	89·9
March	85·7 ...	178·5 ...	27·0 ...	71·4 ...	90·6
April.....	222·2 ...	105·2 ...	176·4 ...	000·0 ...	125·9
May	235·2 ...	222·2 ...	280·0 ...	90·0 ...	206·8
June	130·4 ...	157·9 ...	160·0 ...	000 0 ...	111·9
July	200·0 ...	166·6 ...	38·4 ...	1333·3 ...	434·5
August	150·0 ...	43·4 ...	194·4 ...	000·0 ...	96·9
September ...	80·0 ...	178·5 ...	285·7 ...	000·0 ...	136·0
October.....	114·2 ...	500·0 ...	208·3 ...	100·0 ...	230·6
November.....	192·3 ...	187·5 ...	380·0 ...	83·3 ...	210·7
December.....	50 0 ...	222·2 ...	000 0 ...	250·0 ...	130·5
Average ...	135·9 ...	180·8 ...	171·7 ...	169·0 ...	164·3

Rate of Mortality per 1000 of the population from
Zymotic Diseases in Montbs and Wards.

Month	St. Peter's.	Portland Place.	Market.	St. Michael's	Average
January	0·0	0 0	0·0	0 0	0·0
February.....	0·8	0·9	0·0	0 0	0·2
March.....	3·1	0 0	0·0	1·6	1·1
April	4·8	5·5	2·3	3·1	3·1
May.....	3·8	9·4	3·1	0·0	4·0
June	2·4	1·3	0·7	0·0	1·1
July.....	0·7	4·0	0·7	1·6	1·7
August	1·5	0·0	1·5	1·6	1·1
September	0·8	1·3	3·9	1·7	1·9
October	0 0	5·3	1·5	3·4	2·5
November	0·8	2 7	3·1	1·7	2·0
December	0·7	2·6	0·7	1·6	1·4
Average ...	1·6	2·6	1·4	1·1	1·6

Rate of mortality per 1,000 of the population from the
principal Zymotic Diseases in Wards:—

Ward.	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Year.
St. Peter's	1·3	3·6	1·0	0·5	1·7
Portland Place ...	0·0	5·4	1·7	3·5	2·7
Market	0·0	2·0	2·0	1·7	1·5
St. Michael's.....	0·5	0·0	1·6	2 2	1·1
Average...	0·4	2·7	1·5	1·9	1·7

Shows the number of Zymotic Deaths as they occurred monthly :—

	Whoop-		Small-Scarlet		Erys-		Diarr-		Puerperal		
	ing	Erys-	pox.	Fever.	Cough.	pelas.	Measles.	hoea.	Enteric.	teric.	
January	0	...	0	...	0	...	0	...	0	...	0
February	0	...	0	...	0	...	1	...	0	...	0
March.....	0	...	0	...	2	...	1	...	0	...	1
April	0	...	1	...	11	...	0	...	1	...	0
May	0	...	0	...	12	...	0	...	2	...	0
June	0	...	0	...	4	...	0	...	1	...	0
July	0	...	0	...	4	...	0	...	1	...	0
August	0	...	0	...	3	...	0	...	0	...	1
September.....	0	...	0	...	2	...	0	...	2	...	4
October	0	...	0	...	1	...	1	...	2	...	4
November	0	...	1	...	1	...	0	...	1	...	3
December	0	...	0	...	0	...	0	...	2	...	1
	—	—	—	—	—	—	—	—	—	—	—
	0	2	39	2	12	17	3		6		

Rate of Mortality in Children under five years of age in
Months and Wards.

Month.	St. Peter's.	Portland Place.	Market	St. Michaels.	Average.
January	2·3 ...	6·6 ...	8·5 ...	1·6 ...	4·7
February	6·0 ...	4·4 ...	1·7 ...	1·9 ...	3·5
March	2·3 ...	6·6 ...	2·3 ...	5·2 ...	4·1
April	9·7 ...	6·8 ...	7·2 ...	1·7 ...	6·3
May.....	10·2 ...	13·4 ...	6·2 ...	1·6 ...	7·8
June	4·0 ...	5·5 ...	3·1 ...	0·0 ...	3·1
July.....	7·0 ...	6·6 ...	2·3 ...	7·0 ...	5·7
August	5·4 ...	2·6 ...	6·9 ...	1·6 ...	4·1
September	3·2 ...	8·3 ...	5·6 ...	1·7 ...	4·7
October	4·6 ...	10·7 ...	4·6 ...	1·6 ...	5·3
November	8·1 ...	8·3 ...	8·0 ...	1·7 ...	6·5
December	1·5 ...	6·6 ...	1·5 ...	7·0 ...	4·1
Average...	5·3 ...	7·2 ...	4·8 ...	2·7 ...	4·9

The Rate of mortality in children under five years of age per 1000 for the past seven years :—

Wards	1904	1905	1906	1907	1908	1909	1910
St. Peter's	5·3 ...	6·7 ...	4·5 ...	6·3 ...	4·2 ...	5·1 ...	5·4
Portland Place ...	8·2 ...	8·4 ...	7·7 ...	9·0 ...	10·4 ...	6·4 ...	7·3
Market	6·8 ...	5·7 ...	5·6 ...	6·2 ...	6·5 ...	6·1 ...	4·9
St. Michael's.....	4·6 ...	4·9 ...	3·0 ...	4·5 ...	4·2 ...	4·2 ...	2·8
	6·2	6·4	5·2	6·5	6·5	5·4	5·1

Shows the death rate from the seven principal Zymotic Diseases Wards and Hospitals) :—

	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Year.
Smallpox	0·000 ...	0·000 ...	0·000 ...	0·000 ...	0·000
Measles.....	0·000 ...	0·343 ...	0·236 ...	0·580 ...	0·289
Diphtheria	0·000 ...	0·000 ...	0·000 ...	0·000 ...	0·000
Whooping Cough	0·171 ...	2·321 ...	0·666 ...	0·150 ...	0·827
Fevers	0·171 ...	0·171 ...	0·064 ...	0·322 ...	0·182
Diarrhoea	0·171 ...	0·000 ...	0·580 ...	0·666 ...	0·354
Scarlet Fever ...	0·000 ...	0·085 ...	0·000 ...	0·064 ...	0·037
<hr/>					
	0·513	2·920	1·546	1·782	1·689

NOTIFICATION OF INFECTIOUS DISEASES
from January 1st to December 31st, 1910.

Month.	Membraneous Croup.	Smallpox.	Scarlet Fever.	Enteric Fever.	Puerperal Fever.	Continued Fever.	Diphtheria.	Erysipelas.	Total.
January	10	3						5	18
February ...	16	1						3	20
March.....	21	1	1					6	29
April	21	4						4	29
May	10	4						2	16
June.....	6					3	1	10	
July.....	8	4				3	1	16	
August	6	2							8
September ...	3	2				2	1	8	
October	17	2						3	22
November ...	11	6						1	18
December ...	11	6				1	3	21	
	140	35	1			9	30	215	

A RETURN OF THE NUMBER OF DEATHS AND
DEATH RATE, ALSO THE DEATH RATE

From the Seven Principal Zymotic Diseases, from 1901
to 1910, inclusive, also Phthisis and Respiratory Diseases.

NAMES OF DISEASES.	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
Membranous Croup	...	...	...	...	...	...	...	...	...	...
Smallpox .....	...	...	2	9	...	...	...	...	...	...
Measles.....	3	15	49	10	12	14	30	3	25	12
Scarlatina	8	12	2	9	7	2	14	4	11	2
Diphtheria	4	5	4	9	4	...	2	5	14	...
Whooping Cough..	5	13	29	10	14	...	21	20	8	39
Typhus }	...	...	...	...	...	...	...	...	...	...
Enteric } Fevers	3	8	7	7	6	4	5	5	11	9
Puerperal }	...	...	...	...	2	...	...	...	...	...
Diarrhoea }	...	...	...	...	...	...	...	...	...	...
Dysentery }	57	11	29	27	38	63	21	44	10	17
Erysipelas .....	...	...	1	2	...	...	...	...	2	2
Chicken Pox .....	...	...	...	...	...	...	...	...	...	...
Total Deaths from the Seven Zymotic Diseases	82	64	123	83	83	83	93	81	81	81
Deaths from other Causes	737	774	760	684	738	698	726	792	754	656
Total Deaths for each year due to the Borough	819	838	883	767	821	781	819	873	835	787
Death Rate per 1,000 from the Seven Zymotic Diseases	1·8	1·4	2·7	1·8	1·8	1·8	2·0	1·7	1·7	1·7
Phthisis	1·7	1·5	1·4	0·9	1·3	1·4	1·0	1·4	1·6	1·4
Respiratory Diseases	4·1	4·2	3·9	3·4	4·2	3·5	3·9	3·4	3·8	2·6
Death Rate from all other causes...	11·0	11·9	11·9	11·1	10·9	10·5	11·1	12·5	10·8	10·1
General death rate	18·6	19·0	19·9	17·2	18·2	17·2	18·0	19·0	17·9	15·8

CAUSES OF DEATH REGISTERED IN EACH OF THE SEVEN YEARS
1903—1909, IN 1901, AND THE AVERAGE SEPTENNIAL NUMBER.

	1903	1904	1905	1906	1907	1908	1909	Average	1910
Smallpox	2	9	...	...	...	...	...	1	...
Measles	49	10	12	14	30	3	25	20	12
Scarlet Fever.....	2	9	7	2	14	4	11	7	2
Whooping Cough	29	10	14	...	21	20	8	14	39
Diphtheria	4	9	4	...	2	5	14	5	...
Croup	4	5	1	1	...	...	...	1	...
Enteric Fever ...	4	5	6	4	5	4	7	5	8
Epid : Influenza.	3	4	3	5	6	6	5	4	1
Diarrhoea	29	27	38	73	26	44	10	35	17
Enteritis	10	15	13	2	5	11	4	8	2
Puerperal Fever..	3	2	2	...	...	1	4	1	1
Erysipelas	1	2	...	...	...	...	2	...	2
Phthisis	65	42	62	67	47	68	78	61	67
Other Tubercular Diseases...	6	4	2	2	2	...	1	2	1
Cancer	29	28	24	34	35	33	32	30	44
Bronchitis	85	86	112	95	118	93	110	99	88
Pneumonia.....	53	39	62	65	65	63	60	58	35
Pleurisy	4	2	3	4	2	3	6	3	2
Other Diseases of Respiratory Org.	30	23	9	15	8	12	7	15	3
Cirrhosis of Liver.	5	4	4	7	8	5	3	5	1
Venereal Diseases	5	3	1	2	4	3	3	3	...
Premature Birth..	25	20	20	17	20	30	24	22	21
Dis : and Accid : of Parturition	1	2	2	2	2	2	2	1	2
Heart Diseases ...	75	71	89	75	61	75	82	75	64
Accidents	7	9	22	24	16	25	16	17	14
Suicides	4	10	4	2	6	3	6	5	5
All other causes...	352	323	311	276	319	363	315	322	306
All Causes	886	773	827	788	822	876	835	829	737

Inquests.--Cause of Death.

Convulsions	3
Suffocation.....	4
Prob. Heart Disease.....	3
Syncope	2
Found Drowned	1
Injuries (Railway).....	1
Erysipelas	1
Burns.....	3
Heart Disease	2
Fall.....	1
Prob. Bronchitis	3
Drowning	1
Cut Throat (Suicide)	1
Cut Throat (Murder)	1
Hanging.....	1
Injuriøs (Pit).....	1
Injuries (Tram Car)	1
Injuries	6
Poisoning (Suicide)	1
Peritonitis	1

ASHTON-UNDER-LYNE.

WITH VITAL STATISTICS OF WHOLE DISTRICT DURING 1910 AND PREVIOUS YEARS.

YEAR.	Population estimated to Middle of each Year.	Births	Total Deaths Registered in the District.						Deaths of Non- residents registered in Public Institu- tions beyond the district.	Deaths of Residents registered in Public Institu- tions in the district.	Net Deaths at all Ages belonging to the District.			
			At all Ages.			Rate.*	Number.	Rate. ^a						
			Under 1 year of age	Rate per 1000 Births registered.	Number.									
1	2	3	4	5	6	7	8	9	10	11	12	13		
1900.....	45000	1237	27.4	225	181.8	1088	24.1	292	183	905	20.1			
1901.....	43890	1092	24.8	201	182.2	1006	22.9	283	187	821	18.7			
1902.....	43890	1228	27.9	179	145.7	1006	22.9	281	168	842	19.1			
1903.....	44232	1161	26.2	238	204.9	1076	24.3	324	193	886	20.0			
1904.....	44541	1203	27.0	207	172.0	767	17.2	296	187	6	773	17.3		
1905.....	44880	1183	26.3	212	173.2	979	18.2	273	158	6	827	18.4		
1906.....	45161	1200	26.5	183	152.5	964	17.2	305	183	7	788	17.4		
1907.....	45462	1217	26.7	191	156.9	1004	18.0	299	185	3	822	18.0		
1908.....	45798	1217	26.7	225	183.5	1110	19.0	367	234	3	876	19.1		
1909.....	46225	1069	23.1	176	164.6	1034	18.0	313	202	3	835	18.0		
Averages for years 1900-1909.														
1910....	46514	1093	23.4	162	148.2	975	20.9	372	241	3	737	15.8		

* Rates in columns 4, 8 and 13 are calculated per 1000 of the estimated gross population.

Area of District in acres (exclusive of area covered by water) 1396. Total population of all ages, 43890. } At census
Number of inhabited houses, 9581. Average number of persons per house, 4.58. } of 1901.

I.	II.	III.
Institutions within the District receiving sick and infirm persons from outside the District.	Institutions outside the District receiving sick and infirm persons from the District.	Other Institutions, the deaths in which have been distributed among the several localities in the District.
Union Workhouse	Manchester Royal Infirmary.	
District Infirmary.	St. Mary's Hospital, Manchester.	Nil.
Borough Hospital.	Union Workhouse, Oldham.	
	Ashton-under-Lyne and District Joint Smallpox Hospital.	
		The Union Workhouse is within the District.

ASHTON-UNDER-LYNE.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1910.

H.—Hospital at Ashton. W.—Workhouse at Ashton.

Isolation Hospital, Borough Hospital, Joint Smallpox Board.

Total available beds—28. Number of Diseases that can be eoneurrently treated—1.

0 of the Scarlet Fevers were removed to Oldham.

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CAUSES OF, AND AGES AT, DEATH DURING YEAR 1910.

ASHTON-UNDER-LYNE.

CAUSE OF DEATHS	Deaths in or belonging to whole District at subjoined Ages						Deaths in or belonging to Localities (at all Ages).						Total Deaths				
	All ages	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 35.	35 and under 45.	45 and under 55.	55 and under 65.	65 and over	St. Peter's Ward.	Place Ward.	Market Ward.	St. Michael's Ward.	Union Workhouse.	Borough Infirmary.	In the District.
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Smallpox	12	4	8	1	1	1	1	1	4	2	2	2	2	2	2	2	2
Measles	2	2	22	14	3	..	..	..	15	15	15	..	..	..	..	..	..
Scarlet Fever	39	22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Membranous Group)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Group	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Typhus	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fever	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
{ Enteric	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
{ Other continued	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Epidemic Influenza	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhoea	17	9	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteritis	2	2	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gastritis	15	7	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Phthisis (Pulmonary Tuberculosis)	67	4	5	6	10	40	2	19	8	18	9	12	1	..	..	..	41
Other Tuberculous Diseases	1	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Cancer, Malignant Disease	44	11	17	..	..	..	1	36	7	10	6	16	6	3	3	3	23
Bronchitis	88	..	..	..	..	..	..	35	25	22	21	27	6	12	..	..	26
Pneumonia	35	8	8	3	4	..	..	9	3	6	10	14	1	3	1	..	9
Pleurisy	2	..	..	..	..	..	..	1	1	2	..	..	..	..	..	..	3
Other Diseases of Respiratory Organs	6	1	3	..	..	..	..	1	1	2	1	2	..	..	..	..	..
Alcohcism	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cirrhosis of Liver	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Venerelal Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Premature Birth	21	21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diseases and Accidents of Parturition	2	..	..	1	1	3	2	34	25	15	12	11	1	1	1	..	1
Heart Diseases	64	3	3	1	2	3	2	3	2	2	3	..	6	19	1	..	49
Accidents	14	..	..	..	..	..	..	4	1	2	3	2	2	6	..	..	25
Suicides	5	..	..	..	..	..	..	7	94	90	82	49	65	27	40	25	..
All other causes	288	69	17	11	..	..	..	..	..	..	..	..	..	..	..	..	190
All causes	737	162	86	26	31	271	161	198	147	193	68	94	37	..	..	..	372

ASHTON-UNDER-LYNE.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1910.

Month	Cases Notified in	No. of Cases Removed to Hospital	Total	Cases Notified in	No. of Cases Removed to Hospital	Total
Jan.	1	0	1	1	0	1
Feb.	1	0	1	1	0	1
Mar.	1	0	1	1	0	1
Apr.	1	0	1	1	0	1
May	1	0	1	1	0	1
June	1	0	1	1	0	1
July	1	0	1	1	0	1
Aug.	1	0	1	1	0	1
Sept.	1	0	1	1	0	1
Oct.	1	0	1	1	0	1
Nov.	1	0	1	1	0	1
Dec.	1	0	1	1	0	1

INFANTILE MORTALITY DURING THE YEAR 1910.

Deaths from stated Causes in Weeks and Months under One Year of Age.

ASHTON-UNDER-LYNE.

CAUSE OF DEATH.	Total Deaths under One Year																	
	Under 1 Week	1-2 Weeks	2-3 Weeks	3-4 Weeks	1 month	1-2 Months	2-3 Months	3-4 Months	5-6 Months	6-7 Months	7-8 Months	8-9 Months	9-10 Months	10-11 Months	11-12 Months			
ALL CAUSES	Certified.....	22	8	6	8	44	11	19	10	12	7	10	9	10	14	5	161	1
	Uncertified.....	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
i.	Small-pox .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Chicken-pox .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Measles .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Scarlet Fever .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
	Diphtheria: incl. } Memb. Croup }	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Whooping Cough .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Diarrhoea, all forms .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22
	Enteritis, Muco-enteritis, Gastro-enteritis }	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9
	Gastritis, Gastro-intestinal Catarrh }	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
	Premature Birth	11	..	4	..	1	..	1	..	2	1	..	1	..	1	..	..	7
	Congenital Defects .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	21
	Injury at Birth .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
ii.	Want of Breast-milk, Starvation .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Atrophy, Debility, Marasmus .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
iii.	Tuberculous Diseases	6	2	2	2	12	6	2	2	3	..	2	..	..	..	..	1	28
iv.	Tuberculous Meningitis .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
	Tuber. Peritonitis: Tabes Mesenterica, Other Tuberculous Diseases .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
v.	Erysipelas .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
	Syphilis .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
	Rickets .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Meningitis (not Tuber.) .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Convulsions	4	..	..	..	..	..	2	..	2	1	..	1	..	2	..	..	4
	Bronchitis .....	..	..	..	..	..	..	1	..	2	1	..	1	..	1	..	..	11
	Laryngitis .....	..	..	..	..	..	..	..	..	..	2	..	..	1	..	2	..	11
	Pneumonia .....	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	..
	Suffocation, overlying } Other Causes .....	..	2	1	1	..	1	6	2	..	1	..	1	..	1	..	2	..
	Total.....	23	8	6	8	45	11	19	10	12	7	10	9	10	14	5	162	

Population estimated to middle of 1910 46,514.

Births in the year—legitimate, 1,031; illegitimate, 62.

Deaths from all Causes at all ages, 737.

RATE OF INFANT MORTALITY FOR THE LAST TWENTY YEARS.

YEAR ..	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
Rate ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

YEAR ..	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
Rate ..	168.0	206.0	206.0	229.5	169.6	228.3	195.3	182.2	142.5	199.8	172.0	152.5	179.2	164.6	148.2	—	—	—	—	—

(A)

TABLE OF DEATHS

During the year 1909, in the Urban Sanitary District of Ashton-under-Lyne, classified according to DISEASES, AGES, and LOCALITIES, and showing also the Population of such Localities, and the Births therein during the year.

Names of Localities adopted for the purpose of these Statistics; public institutions being shown as separate localities.	POPULATION AT ALL AGES	Registered Births.	MORTALITY FROM ALL CAUSES AT SUBJOINED AGES.								MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																				
			At all ages.	Under 1 year.	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards	Smallpox	Scarlatina	Diphtheria	Typhus	Enteric or Typhoid	Relapsing	Puerperal	Cholera	Erysipelas	Measles	Whooping Cough	Diarrhoea & Dysentery	Rheumatic Fever	Phthisis	Bronchitis, Pneumonia, & Pleurisy	Heart Disease	Influenza	Injuries	All other Diseases	Total		
St. Peter's Ward	14936	344	198	49	32	11	3	61	42	Under 5	..	1	:.	..	..	..	..	4	14	1	2	17	12	1	2	43	81
Portland Place Ward	8718	253	147	43	21	2	7	44	30	5 upwds	..	..	..	..	1	..	1	2	..	1	..	..	..	14	61	117	64
Market Ward	15083	334	193	54	20	6	7	66	40	Under 5	..	..	..	..	..	..	..	4	15	3	..	1	11	..	1	29	83
St. Michael's Ward....H.....	6682	123	68	11	8	2	4	32	11	Under 5	..	..	..	..	..	..	..	2	7	6	..	2	17	..	..	40	74
Workhouse.....	1095	39	94	2	1	..	6	50	35	5 upwds	1	2	..	3	..	3	2	30	49			
Infirmary	37	3	4	5	4	18	3	Under 5	1	3	12	14	19	..	1	40	91		
Borough Hospital.....	Under 5			
TOTALS	46514	1093	737	162	86	26	31	271	161	Under 5	..	1	12	36	14	..	9	44	1	..	7	124	248			
										5 upwds	..	1	8	1	..	2	..	3	3	5	58	81	63	1	13	239	489

ASHTON-UNDER-LYNE.

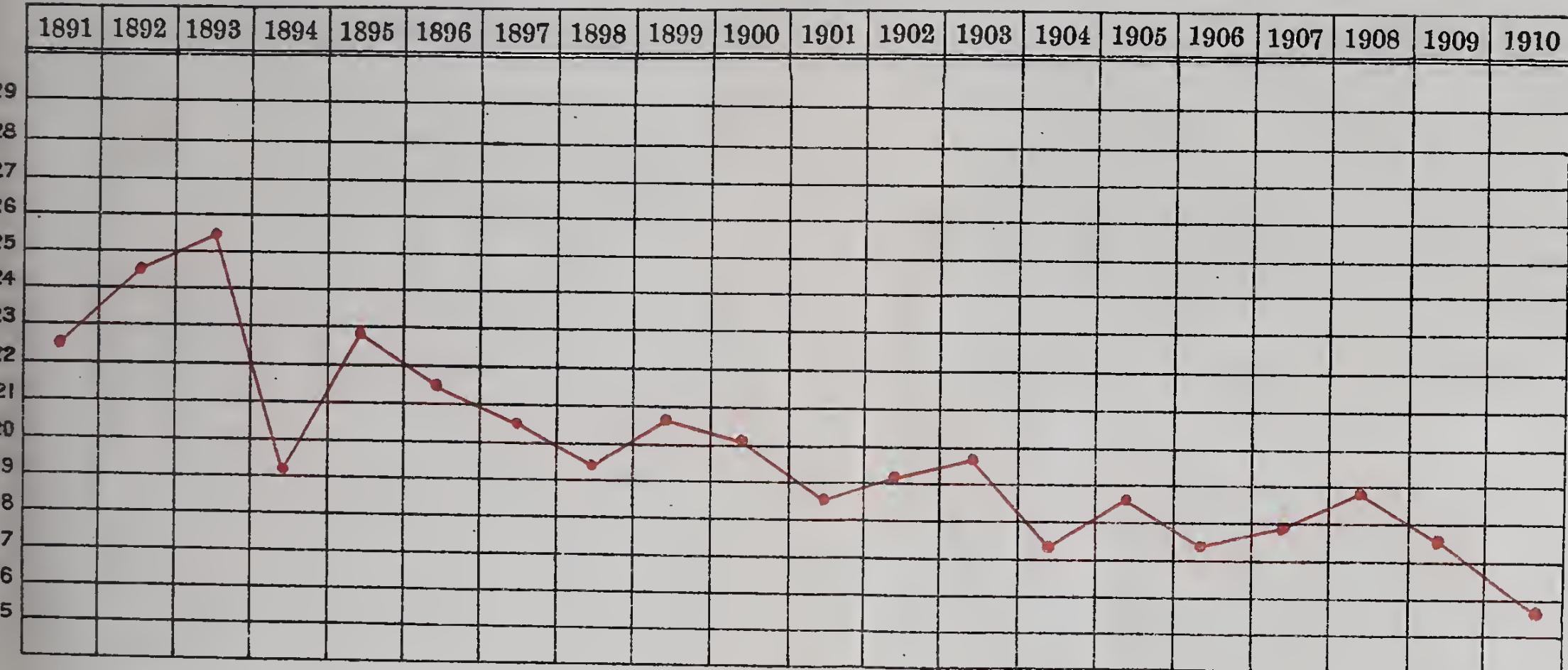
ASHTON-UNDER-LYNE.

VITAL STATISTICS OF SEPARATE LOCALITIES IN 1910 AND PREVIOUS YEARS.

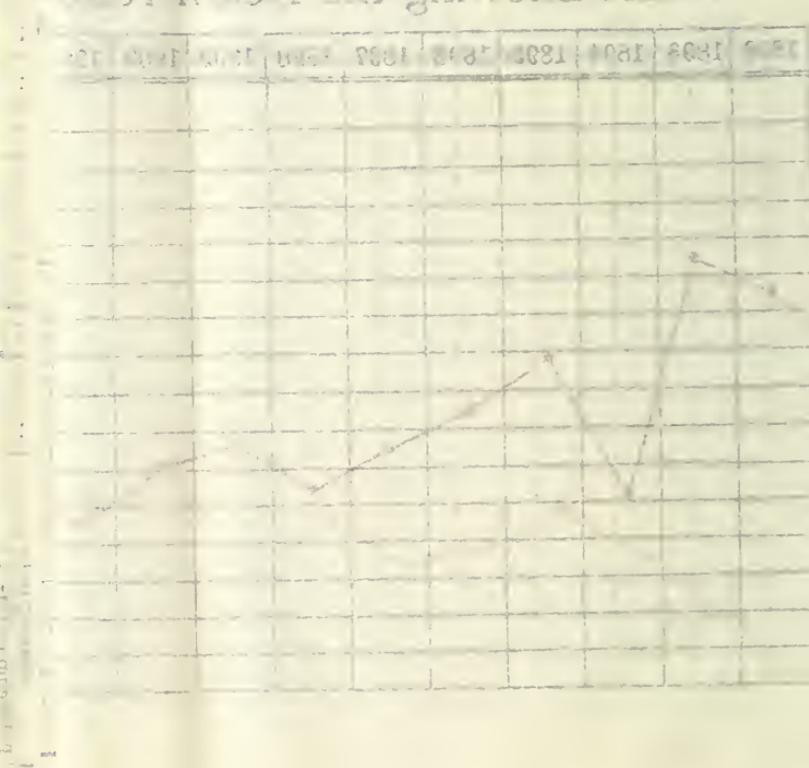
NAME OF LOCALITIES.	YEAR.	ST. PETER'S WARD.				PORTLAND PLACE WARD.				MARKET WARD.				ST. MICHAEL'S WARD.				WORKHOUSE.				INFIRMARY.				BOROUGH HOSPITAL.			
		Population estimated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.
	1900 ..	13969	369	215	52	9218	298	207	63	14643	411	276	80	6286	132	98	29	884	26	90	1	75	17	19	25	15	2	2	0
	1901 ..	13592	323	250	64	8718	237	157	57	14299	391	229	58	6298	120	87	19	983	21	75	3	23	17	19	25	15	2	2	0
	1902 ..	13592	363	236	51	8718	299	169	50	14299	406	229	51	6298	139	95	20	983	21	86	27	107	27	27	85	23	2	2	0
	1903 ..	13760	360	220	70	8718	273	167	54	14397	378	265	76	6346	122	102	24	1011	27	107	27	1006	27	27	85	23	2	2	0
	1904 ..	13928	364	196	55	8718	276	146	52	14495	404	233	70	6394	132	87	20	1006	28	100	28	1031	28	28	100	23	2	2	0
	1905 ..	14096	360	227	69	8718	257	155	53	14593	412	233	61	6442	126	97	24	1031	28	97	28	998	28	28	97	23	2	2	0
	1906 ..	14264	385	216	50	8718	265	150	54	14691	403	225	60	6490	124	75	15	998	23	97	23	985	23	23	83	23	2	2	0
	1907 ..	14432	368	228	64	8718	284	152	42	14789	399	239	62	6538	137	89	18	985	28	83	28	1007	46	96	37	28	2	2	3
	1908 ..	14600	378	209	55	8718	294	197	75	14887	380	261	67	6586	129	76	23	1120	29	86	29	1120	29	86	23	23	2	2	0
	1909 ..	14768	324	230	49	8718	241	144	40	14985	350	245	66	6634	125	105	15	1120	29	86	29	1120	29	86	23	23	2	2	0
Averages of years 1900 to 1909.		14100	359	222	57	8768	272	164	54	14607	393	243	65	6431	128	91	20	1000	27	90	4	..	0·1	22	9·7	..	0·1	2	0·3
1910 ..		14936	344	198	49	8718	253	147	43	15083	334	193	54	6682	123	68	11	1095	39	94	2	..	0	37	3	..	0	0	0

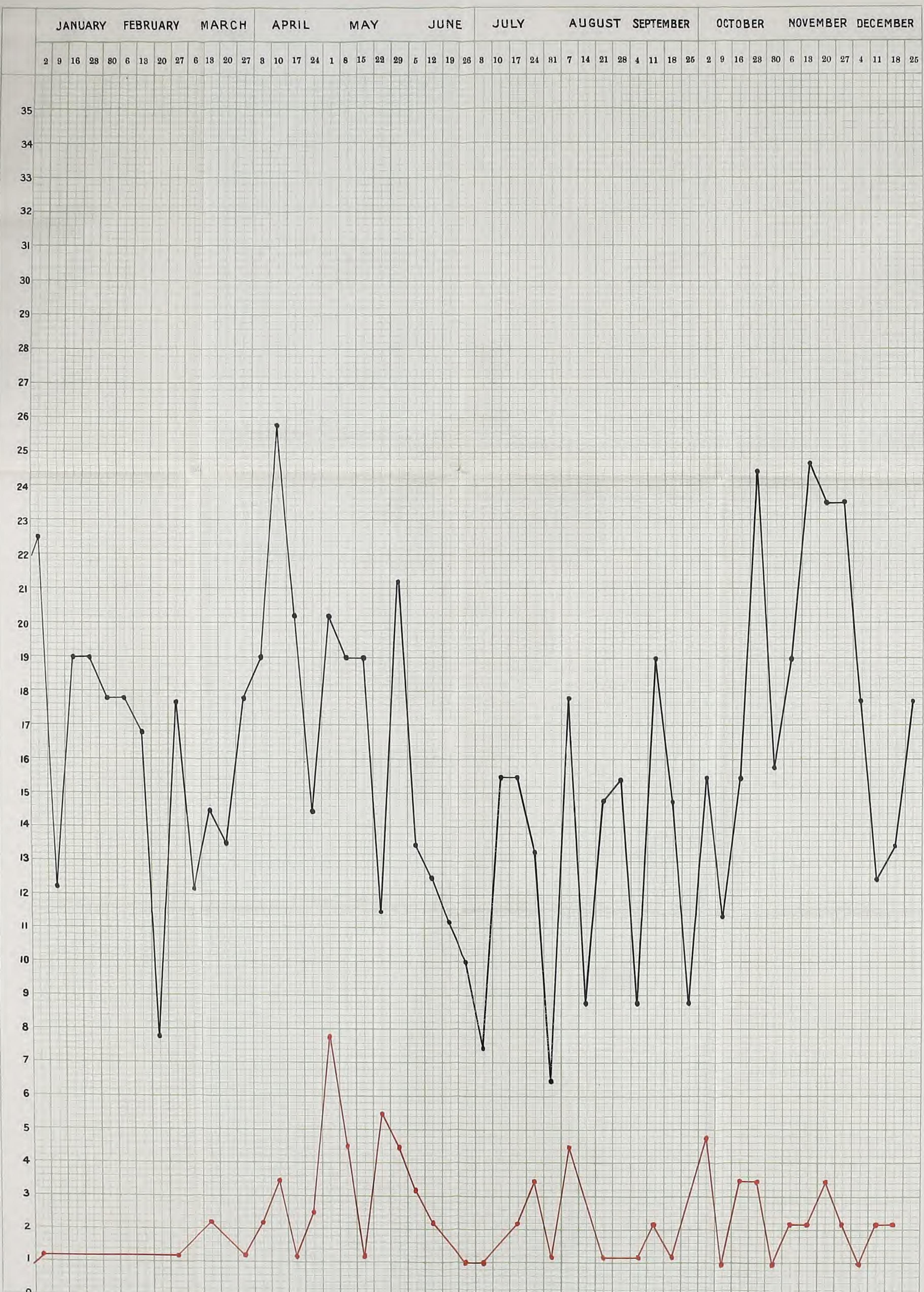
ASHTON-UNDER-LYN

Chart Showing the Death Rate for the last Twenty Years.



ASHTON-UNDER-LYNE.





MATERIALS AND METHODS		RESULTS	DISCUSSION
ITEM	DESCRIPTION		
1. <i>Sample</i>	Two samples were used, one from a 10-year-old male patient with a history of recurrent episodes of pain in the right knee and another from a 10-year-old female patient with a history of recurrent episodes of pain in the left knee.		
2. <i>Specimen</i>	The specimen was obtained by arthroscopy of the knee joint. The synovial fluid was collected in a sterile container and sent to the laboratory for analysis.		
3. <i>Assay</i>	The assay was performed using a commercial enzyme-linked immunosorbent assay (ELISA) kit (Immunodiagnostic Systems, Inc., Tempe, AZ). The kit contains a monoclonal antibody specific for the C-terminal fragment of the fibrinopeptide B chain of fibrinogen. The assay measures the concentration of this fragment in the synovial fluid sample.		
4. <i>Statistical Analysis</i>	The results of the assay were analyzed using a paired t-test to determine if there was a significant difference between the two patients' synovial fluid samples.		
5. <i>Conclusion</i>	The results of the assay showed that the C-terminal fragment of the fibrinopeptide B chain of fibrinogen was present in both patients' synovial fluid samples, indicating that they had a diagnosis of fibrinolysis.		

